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RATE THEORIES

AND

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PREFACE

The establishment of theories upon which public utility rate control should be based is one of the most controversial problems in the United States today, in economic, political, and legal fields The polemical and often partisan nature of the literature that is appearing in large volume indicates, moreover, great confusion of thought. Careful examination of the wealth of material and experience that is now available throughout the country should do much toward clarifying the situation Studies for this purpose are now being made in various states; the state of New York, for example, has just completed an elaborate and exhaustive survey of regulation within its boundaries

The intensive research here presented deals with the work that has been done by the California Railroad Commission in rate-making. It was selected for the following reasons: (1) The California commission is one of the leading regulatory bodies in the country and its actions are decidedly typical; (2) some of its theories are novel and most of them are salutary, finally, (3) the Commission has now been functioning for virtually twenty years and hence a perspective can be obtained through which its activities and tendencies can be gauged with a reasonable degree of certainty. Comparisons have been made with the theories and practices of other regulatory agencies, and an endeavor has been made to present a fair appraisal of what has been done in this state, together with some suggestions as to changes that appear to be necessary.

The deliberate limitation of the study to an analysis of rate theories has made it necessary to ignore many phases of the commission's activities. This procedure obviously has its disadvantages, but it is believed that it has in its favor the merit of setting forth in sharp outline the fundamental economic issues at stake.

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CHAPTER I

HISTORY OF REGULATION IN CALIFORNIA

The history of railroad legislation in the state of California begins with the year 1861 At that time the only regulation to which railroad companies were subject was embodied in a statute passed and approved on May 20, 1861, which was entitled·

> An act to provide for the incorporation of Railroad Companies, and the management of the affairs thereof, and other matters relating thereto [1]

According to this statute railroad corporations had to have at least ten shareholders and stock had to be issued for at least $1,000 per mile, 10 per cent of which had actually to be paid into the treasury before the certificate of incorporation was granted The stockholders were to be subject to proportional liability. Section 51 prescribed the maximum rates that were to be charged:

> It shall be unlawful for any such railroad company to charge more than ten cents per mile for each passenger, and fifteen cents per mile for each ton of freight, transported on its road, and for every transgression of such limitation, the company shall be liable to the party suffering thereby, treble the entire amount of fare or freight, so charged to such party; PROVIDED that in no case shall the company be required to receive less than twenty-five cents for any one lot of freight for any distance.

To the legislature was also reserved the right to reduce rates, when the net income of any company should exceed 20 per cent of its capitalization.

Owing to the power of the railroad officials, to their unscrupulousness, and to their lack of any sense of public duty, this legislation was absolutely useless. Public sentiment and resentment rose, however, because of the aggression of the Central Pacific Corporation, and brought about the passage of the law of 1876. The regulation of public utilities in California really had its inception in this legislation, which was approved by the governor of the state on April 3, 1876.[2]

This act of 1876 provided for the appointment by the governor of three commissioners of transportation, who were to hold office for

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[1] Laws of California, 1861. chap. 532.

[2] Laws of California, 1875 and 1876, chap. 515.

two years They were to have absolutely no connection with any railroad corporation or company during their term of office. The salary of each commissioner was to be $3,000 per annum. The chief duty of this board of commissioners was the supervision of steam railroads in regard to the accommodation provided and the security afforded the public Every railroad corporation was to file a copy of its tariffs with the commissioners and these rates were not to be increased in any way by the corporation. In addition, annual reports furnishing information specified in the act, had to be filed with the commissioners. Chapter 2 of the statute defined and prohibited extortion and unjust discrimination.

It will be noted that the commissioners had no power over the tariffs of railroads so long as these tariffs conformed to those that had been filed with the board. The statutory provisions of 1861 were the only check on the companies.

The law of 1876 was superseded in 1878[3] by a measure wherein the three transportation commissioners were replaced by one man, styled the commissioner of transportation, who was to be appointed by the governor for a term of four years. When the power and audacity of the railroads in California is recalled, the impotence of this legislation can be very well gauged by reading clause 16, which stated that the commissioner might *examine* complaints of discrimination (local, not personal) and endeavor to bring about an amicable settlement.

In January, 1878, another act, which received the approval of the governor, indicated the growth of public utilities in California and the gradual emergence of the public utility problem. The purpose of this statute was to limit and fix the fares on street railroads in cities and towns of more than 100,000 inhabitants. Accordingly the maximum fare was to be five cents for each trip, each way.[4]

The next step in the history of utility regulation in California came with the adoption of the new state constitution in 1879. A number of reasons brought this about, but the details are not necessary here. It is sufficient to say that during these trying times public resentment was fully aroused against the railroad corporations, which had come to be regarded by the people as unprincipled exploiters; hence the desire to reduce and to regulate the charges of the Central Pacific was one of the important motives for calling a constitutional

[3] Statutes of California 1878, chap. 641. This act repealed the one of 1876.
[4] Laws of California, 1878, chap. 11.

convention and adopting the constitution of 1879.[5] Subsequent public utility legislation and regulation in the state has been based upon article 12, sections 17 to 22, inclusive, of the constitution framed in that year.[6]

The fundamental law of the state of California contained some very express provisions as to the power of the government over transportation Later amendments extended this to all public utilities. All railroad, canal, and other transportation companies were declared to be common carriers and subject to legislative control It was stipulated that:

> whenever a railroad corporation shall, for the purpose of competing with any other common carrier, lower its rates for transportation of passengers or freight from one point to another, such reduced rates shall not be again raised or increased from such standard without consent of the governmental authority in which shall be the power, to regulate fares and freights.[7]

Discrimination in charges or facilities for transportation between places or persons was distinctly forbidden, and transportation companies were prohibited from charging more for the carriage of persons and property of the same class, in the same direction to any station, landing, or port, than to any more distant station, port, or landing.[8] Thus the long-and-short haul provision in a modified form was embodied in the constitution of the state

The Railroad Commission for the state was created under section 22, article 12 Three districts, as nearly equal in population as practicable were created, and each of these was to elect a railroad commissioner, who was to hold office for four years. The Commission was given power over transportation rates in the state and could prescribe a uniform system of accounting, which the corporations were bound to follow

In accordance with the new constitution, the first legislature convening under it passed "An Act to Organize and Define the Powers of the Board of Railroad Commissioners."[9]

Transportation companies were defined in section 14 to include railroads (other than street railroads), steamship lines engaged in intrastate traffic, and steamboat companies operating on the rivers

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[5] "Many of the delegates were chiefly interested in the solution of this problem, and all were impressed with its importance."—Swisher, Carl B., *Motivation and Political Technique in the California Constitutional Convention* :54.

[6] Constitution of California, 1879, art. 12.

[7] Constitution of California, 1879, art 12, sec 20.

[8] *Ibid*, sec. 21; see *infra* chap 6.

[9] Laws of California, 1880, chap. 59.

and inland waters of California. The other sections of the act merely amplified the provisions laid down in the constitution. The legislation of 1878 was not repealed and presumably it remained in force, in so far as it was not inconsistent with the constitution.

For the next thirty years there was no further legislation concerning public utilities. This is not to be interpreted as a proof of the effectiveness of the laws we have just sketched. Indeed the actual circumstances were the very opposite. The history of regulation during this whole period was one of utter helplessness, and often unscrupulousness, on the part of the Commission; and of gross selfishness and lack of public spirit on the part of the railroads. It was an excellent example of private interest running riot, aided by irresponsible government.[10]

A fairly good summary of the situation down to 1911, is given by Harley W. Brundige, president of the Railroad Commission of California, in the annual report of that body for 1920–1921:

> In those early days the public had no supervision at all, either over rates or over the quality of service rendered by the corporations supplying these essential services. In those unhappy days the rule of rate-making was "all the traffic will bear" and the rate-making power, vested as it was in the public utility corporations was made an instrument to burden and to oppress the people.
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> Particularly was this true of the railroads exercising the rate-making power to favor or to oppress, not only individuals, but whole communities. Certain shippers were favored in rates over their business competitors in the same line, rebates were granted to the favored few, and those who incurred the wrath and displeasure of the railroad were denied privileges and facilities to which they were by right entitled.
>
> In those early days the individual who asserted that the business of the railroad company, or any other public service utility, differed in any manner from the business of the retail merchant or of the farmer in selling his own products, was regarded as a radical, dangerous to the state and to society.
>
> When in 1879 it was provided in the new constitution that the Railroad Commission be created and given jurisdiction over the rates of railroad companies and charged with the specific duty of seeing that passenger and freight rates were non-discriminatory as between individuals and communities, there was a great outcry that the state was interfering with private business over which it had no concern. So lethargic was public sentiment, so complete was the political control of the railroads, that it was not until 1911 that the legislature of the state of California adopted proper legislation to give force and effect to the constitutional provisions adopted by the people in 1879.[11]

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[10] For a thorough account of the political activities of the California railroads, see Daggett, *History of the Southern Pacific* especially chapters 11 and 12. For an interesting account of the Railroad Commission of California up to 1895, see S. E. Moffett, "The Railroad Commission of California—A Study in Irresponsible Government," *Annals of American Academy*, vol. 6, March, 1895.

[11] Annual Report, C. R. C. 1920–1921:21–22.

A gradually awakening public sentiment, however, broke the long period of inactivity and inattention in 1909 People insisted upon reform, and although it was two years before anything very effective was accomplished, yet the wedge had been inserted and drastic changes soon followed. The Wright Act of 1909 was entitled "An Act to provide for the Organization of the Railroad Commission of the State of California, and repealing the Acts of 1878 and 1880."[12] This statute raised the salary of each commissioner to $6 000 per year The commissioners had the power to establish maximum rates, and they were given jurisdiction over railroads operated for commercial purposes, express companies, sleeping-car companies, and companies operating vessels engaged in carrying freight or passengers on the waters of the State of California. No changes in rates could be made except after thirty days' notice to the commission and to the public.

The growing desire for effective control over the public utilities in the state culminated in the legislation of 1911. In this year three constitutional amendments were adopted and two acts passed, the more important of the latter being the Public Utilities Act of 1911, which forms the core of utility regulation in California today. All subsequent legislation has been an adaptation of, or an addition to, the original statute

The first measure of the series was the Railroad Commission Act or the Stetson-Eshleman Act, approved on February 9, 1911.[13] This statute repealed the three preceding ones—1878, 1880, and 1909, the constitution of the board and the salaries of the members, however, remaining the same. All transportation companies were to be under the jurisdiction of the board; the term transportation company included all railroad, express, despatch, sleeping-car, dining-car, and drawing-room car companies, all refrigerator, oil, stock, and fruit car companies, and all car loaning, car renting, car loading, and all car companies, and all companies operating vessels engaged in the transportation of freight or passengers between points within the state. The act stipulated that it was the duty of the Commission, and the Commission was given power, to establish rates of charges, including joint rates over through routes, for the transportation of freight and passengers by all railroad or other transportation companies, subject to the provisions of that statute. Moreover, if it was believed that any charge was unreasonable or discriminatory, or any service inade-

[12] Laws of California, 1909, chap. 312.

[13] Laws of California, 1911, chap 20.

quate, the board could investigate upon its own motion, and if necessary prescribe a public hearing. Authorization was given the Commission to ascertain the actual value of all the property owned by any transportation company in the state, the actual value of the property used for the convenience of the public, and the market value of the capital stock and bonded indebtedness of every such corporation. The Commission was empowered to prevent discrimination, and the "long-and-short haul" principle was to be adhered to except where permission to do otherwise was granted. All transportation companies were to keep their accounts according to a uniform system, to be prescribed by the board.

The legislature of 1911 decided that the powers of the railroad commissioners should be increased to cover all classes of public utilities within the state, and that the scope of the Commission's powers over such utilities should be extended to include, in addition to rates and accounting, matters of service and finance. Accordingly, three constitutional amendments were submitted to the people of the state, and were adopted at a special election held on October 10, 1911.

Assembly Constitutional Amendment No. 6[14] provided for a Commission of five members to be appointed by the governor from the state at large. After January 1, 1915, each member was to hold office for six years. The commissioners, or a single commissioner, might establish rates of charges for the transportation of passengers and freight by railroads, and other transportation companies, and the latter were compelled to abide by such rates. In addition, power was given to examine all the records of such companies and they were compelled to adopt a uniform system of accounts as prescribed.

Assembly Constitutional Amendment No. 50 forbade any transportation company to raise its rates without permission from the Commission and the decision of the latter "upon the showing so made shall not be subject to review by any court except upon the question whether such decision of the commission will result in confiscation of the property." Violation of the "long-and-short haul" principle was forbidden, and no greater charge was to be made for a through rate than the aggregate of the intermediate rates, subject to the provision, however, that the Commission might allow exceptions after investigation.[15]

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[14] Laws of California, 1911, chap. 53.

[15] Laws of California, 1911, chap. 52.

Senate Constitutional Amendment No 47 defined a public utility as

Every private corporation, and every individual or association of individuals, owning, operating, managing, or controlling any commercial railroad, interurban railroad, street railroad, canal, pipe-line, plant or equipment, or any part of such railroad, canal, pipe-line, plant or equipment within this state, for the transportation or conveyance of passengers, or express matter, or freight of any kind, including crude oil, or for the transmission of telephone or telegraph messages, or for the production, generation, transmission, delivery or furnishing of heat, light, water, or power, or for the furnishing of storage or wharfage facilities, either directly or indirectly to or for the public, and every common carrier.

All such were declared to be subject to the regulation and control of the Railroad Commission and also any others that the legislature might add at any subsequent date All powers over utilities previously invested in political subdivisions of the state were transferred to the Commission, except that any city or county or incorporated city or town might vote to retain the control over utilities in its area.[16]

Prior to the enactment of the Public Utilities Act of December 23, 1911, the public had practically no means of securing even approximately fair rates from any utility other than railroads. The franchises as granted to companies contained stipulations as to rates to be charged, but since these contracts were usually for forty years this method of regulation was obviously unjust and inequitable As a result of the failure of franchise rates to protect public interest, the control over charges had been given to municipalities and county boards of supervisors. This plan, also, proved unworkable and far too expensive Efficiently organized corporations proved too powerful an influence in local affairs, as did the railroads in state, and municipal regulation broke down. Hence the provisions in the constitutional amendments of 1911.

While the legislature and the state were busy modifying the constitution, the Railroad Commission was collecting information which was to be valuable for legislative purposes. Realizing the inevitable movement toward regulation the board sent its attorney, Mr. Max Thelen, to investigate the leading railroad and public service commissions of the United States. Upon his return, the Commission, together with certain members of the state legislature, framed the Public Utilities Act and it was introduced to the Assembly on November 28, 1911. Governor Johnson approved it on December 23 and it became effective on March 23, 1912. Since 1911 a goodly number of laws

[16] *Laws of California*, 1911, *chap.* 60.

have been passed which have either added to or amended the Public Utilities Act of that year. We shall shortly take note of these as they are embodied in the act to date. There were also one or two other changes of importance which should be noted here.

The Hewitt Election Act, approved by the governor[17] on January 2, 1912, gave force to amendment No. 47, and provided that any city or county, incorporated city or town could, if it so desired, vote to transfer its control over public utilities to the Commission, and could, if it so wished, re-invest itself with such powers at a future election

On November 3, 1914, section 23 of article 12 of the constitution was amended by giving the legislature the power to confer upon the Railroad Commission jurisdiction over all the rates of all privately owned public utilities in the state, whether in incorporated cities and towns or in unincorporated territory, but not to municipally owned utilities.[18] The authority thus conferred was exercised by the legislature the next year.

On April 23, 1915, the Public Utilities Act was revised and in its revised form became effective on August 8.[19] The Hewitt Election Act was likewise changed to meet the new conditions.

The powers which the Railroad Commission of the state of California exercises are thus seen to be derived from two main sources: (1) the provisions of the constitution, which have already been discussed, and (2) the Public Utilities Act, originally passed in 1911, and revised and re-enacted in April, 1915. In addition, at every session of the legislature since then amendments to the act and new statutes adding to the powers of the Commission have been passed. We shall not take the time to discuss these nor shall we enumerate all the provisions of the act itself. It will be sufficient if we discuss the status of the Commission as embodied in the legislation to date.[20]

The Public Utilities Act provides for a Railroad Commission of five members appointed by the governor from the state at large, each member holding office for six years. The powers of the Commission pertain to public utilities in California and these utilities are defined and set forth in the act. At the present time the utilities doing intra-

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[17] Laws of California, 1911, chap. 40.

[18] Assembly Constitutional Amendment 62, chap 93, Stat. 1913.

[19] Laws of California, 1915, chap. 91.

[20] A summary of the legislation to date can always be found in the latest report of the California Railroad Commission. A copy of the Public Utilities Act is published after each session of the legislature. It contains the legislative enactments, pertaining to Public Utilities, to date.

state business and subject to the jurisdiction of the Commission are as follows: steam railroads, electric railways, express companies, sleeping-car companies, electric companies, gas companies, telephone and telegraph companies, water companies, warehouse companies and wharfingers, auto stages and auto trucks, and pipe-lines Nine airplane corporations have also filed rate schedules with the board [21]

The act contains some very explicit provisions concerning the duties of public utilities. Section 13 states that all charges made by public utilities shall be just and reasonable, while section 14 makes it obligatory to file schedules of all rates with the Commission, these schedules must state separately all terminal charges No charge made by any public utility can be changed except after thirty days' notice, unless special permission to do so is received [22] No common carrier can charge or receive any greater compensation in the aggregate, for the transportation of persons, or a like kind of property, for a shorter than for a longer distance over the same line or route in the same direction within the state, the shorter being included within the longer distance, nor charge any greater compensation as a through rate than the aggregate of the intermediate rates.[23] This same provision applies to telephone and telegraph corporations. It is understood of course that the Commission has the power to modify these conditions as it sees fit.

No street or interurban railroad corporation may charge, demand, collect, or receive more than five cents for one continuous ride in the same general direction within the corporate limits of any city or town without the consent of the Commission. Every public utility is required to submit reports in the form prescribed by the Commission, annually and at any other time desired, and also to furnish any statistics that may be requested.

The powers and duties of the Commission itself are set forth at length in sections 31 to 52. This body may hear cases on its own motion or upoin complaint, it may determine what rates are just, reasonable, and sufficient, and may compel the public utility concerned to abide by its findings. It may investigate rates or tolls whenever it wishes, and if they are found to be excessive or discriminatory, it may prescribe new ones. The Commission has supervisory power

[21] Annual Report of the C. R. C 1928–29·13. The Public Utilities Act does not give the Commission jurisdiction over aircraft transportation but aircraft carriers are required by state constitutional provisions to file tariffs, and must secure permission before making changes.—*Ibid.*:70.

[22] Public Utilities Act, sec. 15.

[23] *Ibid.*, sec. 24 (A).

over the service rendered by bodies under its jurisdiction and it is necessary for any one carrying on a public utility business to secure a certificate of public convenience before undertaking operations

In order to facilitate the regulation of rates and to aid in determining what is a just and reasonable charge, the Commission is authorized to ascertain the value of the property of each public utility in this state, including any fact or element of value which in its judgment may or does have bearing on such value[24] Furthermore, it can require that the utility companies follow a system of accounts which must not be inconsistent with that prescribed by the Interstate Commerce Commission. Finally, depreciation accounts, new construction, transfer of property, issue of stocks and stock certificates, bonds, notes, and other evidence of indebtedness are all to be handled according to regulations prescribed by the Commission.

The last portion of the act, sections 53 to 86, deals with the procedure before the Railroad Commission and the courts. Section 67 is the most important for our purpose. It stipulates, among other things, that "The findings and conclusion of the Commission on questions of fact shall be final and shall not be subject to review."[25]

It will be noticed at once that the Public Utilities Act of California does not lay down definite rules of rate-making. Although the law gives the Commission the power of valuation, it does not say what a reasonable return is; it does not set a rate level nor does it lay down the rule to be followed in deciding what is a reasonable rate The power to determine the property value of a utility is given so that this knowledge may be available for the guidance of the Commission: but the Commission is not compelled by statute, however, to determine a rate base.

These provisions in the California law give the regulatory body in this state more discretion in fixing rates than is possessed by the Interstate Commerce Commission. The latter body is compelled by law to fix rates that will, as nearly as possible, give a fair return on the aggregate value of the property of the carriers used and useful in the service of transportation. Moreover, the law prescribes what constitutes a fair return, and the Valuation Act of 1913 lays down the rules to be followed in determining the value of railway property.[26]

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[24] *Ibid.*, sec. 47 (A). Valuation is not obligatory so far as the Commission is concerned.

[25] *Ibid.*, sec. 67.

[26] Valuation is made the basis of rate regulation in Wisconsin, but the Public Utilities Commission itself has the power to determine what the rate of return shall be. See Holmes, F. L., *Regulation of Railroads and Utilities in Wisconsin*, p. 45 f.

A review of public utility legislation in California shows that, while some of the measures perhaps were hastily conceived, the general movement has been one of slow growth over a long period of time, and the existing legislation is the result of careful thought and study The act of 1911 marks a turning point in utility history in the state Unregulated and unbridled private ownership had showed itself quite incapable and intolerable; hence the introduction of rigid public supervision For a considerable time the Commission labored under a big handicap, namely, the bad inheritance left by the utilities themselves This should be remembered when a critical estimate of the work and results of regulation is being made Actual procedure may be challenged, but the history of public utility legislation leaves little room to doubt the desirability and necessity of regulation.

CHAPTER II

FAIR VALUE

Introduction

Analysis of the decisions of the California Railroad Commission reveals the fact that a number of distinct principles have been used in its rate-making policy. In many instances the basis upon which a particular decision has been made is stated, in other cases it must be inferred; but nowhere can there be found a complete statement of all the theories and factors which have guided the Commission on all the occasions when it has been called upon to render its verdict. At one time it has used one formula, at another, others have been enunciated, while often a number have been combined in various ways. The classification which has recommended itself as being most suitable for analytical purposes is the following: (1) Fair Value, (2) Fair Return, (3) Cost of Service and Particular Rates; (4) What the Traffic Will Bear; (5) Competitive Rates, (6) Potential Competition; (7) Comparative Rates. It should be noted, however, that any such classification is more or less artificial, and that at no time are the authorities rigidly bound by formula. Each problem is considered on its merits and the conclusion reached in a case as a whole is the one designed to give the best solution. These remarks should be borne in mind when the following discussion is read.

The present chapter is an analysis of the theory of fair value as developed by the authorities in California, and of the application of this theory in order to determine what the fair return of a utility *may* be and in the opinion of the commissioners *ought* to be[1] An examination of the decisions of the California Railroad Commission demonstrates conclusively that its members have at all times kept themselves closely in touch with developments elsewhere, especially with the Interstate Commerce Commission, the Wisconsin Railroad

[1] "The sooner it is understood by the utilities that under modern conditions they are literally at the mercy of the State, the sooner they will realize that only equitable considerations are the ones that will finally have weight, and until commissions and courts representing the sovereignty of the State realize that always they should make the '*ought*' determine the '*must*' such governmental agencies have not become equal to their task." *City of Monterey vs. Coast Valleys Gas and Electric Co.* 4 C. R. C. 1366. (Italics mine.)

Commission, the Supreme Court of the United States, and the various state and federal courts Hence it is safe to say that the policy in California is typical of what is taking place in the field of utility regulation in general.

Fair Value for Rate-Making

Determination of the general level of rates on a cost basis places upon the shoulders of the regulating authorities the responsibility of determining what the total cost of rendering utility service to a community *is* and *ought* to be Obviously this total cost must include a return to owners of utility enterprises sufficient to induce them to stay in the business and meet the needs of those demanding service. Consequently, it is deemed necessary for those in charge of regulation to determine the respective sums of money upon which investors in public utilities are to be allowed a return, the rate of return to be granted on the sums as fixed, and, lastly, the total revenue necessary to give the prescribed return

Theories of rate bases—

The first and most fundamental task with which the commissions and courts are confronted is determination of the "fair value" upon which a return should be allowed.

In spite of its overwhelming importance, or probably because of it, the problem of what the rate base should be is one of the most disputed questions in the field of regulation today Three main theories have been advanced in this connection by the courts, commissions, and utilities, respectively: (1) the so-called theory postulated in Smyth vs. Ames, (2) original cost to date, sometimes called historical cost; (3) cost of reproduction

In the celebrated case of *Smyth vs. Ames*, 169 U. S. 466 (1898) the presiding judge, Mr Justice Harlan, laid down the principles to be followed in determining the reasonableness of the rates of a utility company, in the following terms:

> In order to ascertain that value the original cost of construction, the amount expended in permanent improvements, the amount and market value of its bonds and stocks, the present as compared with the original cost of construction, the probable earning capacity under particular rates prescribed by statute, and the sum required to meet operating expenses, are all matters for consideration, and are to be given such weight as may be just and right in each case. We do not say that there may not be other matters to be regarded in estimating the value

of the property What the company is entitled to ask is a fair return upon the value of that which it employs for the public convenience On the other hand what the public is entitled to demand is that no more be exacted from it for the use of a public highway than the services rendered by it are reasonably worth.[2]

This basis includes a number of very general factors, and no rule is prescribed whereby the relative weight to be given each can be measured. The decision itself formed the basis of valuation set forth in the Valuation Act of 1913, governing the Interstate Commerce Commission It also furnished the foundation for the valuation of utility property by the California Railroad Commission.

A second method of determining the base upon which rates shall be fixed is that of original cost to date or *historical cost* According to this theory the rate base represents the actual sacrifice of the investors upon which they are entitled to a return from the public. Thus the original cost of the property may be found by adding to the cost of the original plant the cost of additions and betterments, and deducting depreciation; or by finding the actual cost of the present property used and useful in the public service, and deducting depreciation. The latter is the theory that has been followed in the main by the California Commission in setting the rate base. Mr. Justice Brandeis and Mr. Justice Holmes in dissenting opinions in: *Southwestern Bell Telephone Co. vs. Pub Serv. Com of Mo.*, 262 U S. 276; and *Bluefield Water Works and Improvement Co. vs. Pub. Serv. Com. of West Virginia*, 262 U. S. 679; held to the prudent investment basis also; and in delivering the opinion in *Georgia Railway and Power Co. vs. R C. of Georgia*, 262 U. S. 625, Mr Justice Brandeis again took the same stand.[3]

The third basis on which rates may be fixed is the *cost of reproduction* of the property used and useful in the public service This may be the cost of reproduction new less depreciation, of the property as of the time of valuation: or it may be the cost of reproduction new less depreciation of the identical plant under original conditions. The latter corresponds to what the California Commission calls the "present value" of the property used and useful in the public service.[4]

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[2] 169 U. S. 466, 546.

[3] See Bauer, J., *Regulation of Public Utilities*, chap. 5, for a discussion of these cases.

[4] See Pegrum, D. F., "Legal vs. Economic Principles in Utility Valuation," *Journal of Land and Public Utility Economics*, 6:127–135 (May, 1930).

General theory of valuation—

Before discussing the method employed by the California Railroad Commission in determining what is a fair value for rate-making, it will be instructive for us to review the general theory of valuation employed in the valuation cases. As we shall see later, the methods used in this state have been practically the same as those of the Interstate Commerce Commission, the actions of both bodies having their origin in Smyth vs Ames.[5]

The California Commission originally derived its authority to determine the value of all the property owned by any transportation company, and useful in the public service, from the Stetson-Eshleman Act of 1911.[6] The provisions contained therein were carried over into the Public Utilities Act of December 1911 effective March 23, 1912. By virtue of this legislation the power of the Commission on valuation was extended to include all public utilities operating within the state of California, section 47 of the act giving the Commission the authorization, section 70 setting forth the method of procedure.[7] This act did not, however, say what items the authorities were to consider in their evaluation proceedings. This was in striking contrast to the Valuation Act of 1913, for the California Railroad Commission was given a much freer hand than was the interstate body.

The first railroad valuation case in California, instituted on the Commission's own initiative, was that of the *Stockton-Terminal and Eastern Railroad Company*, conducted by Commissioner Thelen.[8] The importance of this opinion lies in the fact that it set forth in detail the method to be followed in valuation cases and became a precedent for the subsequent procedure of the Commission. Consequently it will be advantageous to discuss it at some length.

The cases on valuation conducted in California have been really in the nature of investigations into the cost and capital accounts of the corporations concerned, rather than decisions on the value of the property in an economic sense. Moreover, the findings have been entirely irrespective of the use to which the figures might be put for any particular purpose and hence the "values" set forth by the

[5] See Jones, E., *Principles of Railway Transportation*, 264 f. The Valuation Act of 1913, from which the I. C. C. derived its authority on valuation, was based, as far as considerations of points to be considered in valuation were concerned, on the decision rendered in Smyth vs. Ames. It should be noted that the *application* of the theory of valuation to rate making has had a different history in California from that which it has had in interstate commerce.

[6] Laws of California, 1911, chap. 20; *supra*, chap. 1.

[7] Public Utilities Act, sections 47 and 70

[8] 2 C. R. C. 777.

Commission in these cases have not necessarily been used as rate bases; instead, they have merely formed a guide, when occasion has arisen to use them [9] The findings in this case were discussed under the following headings:

(1) Organization, Construction, and Operation

Facts concerning the history of the formation of the company, the subsequent building of the railroad, its period of operation, and the nature of the territory it traversed, were all set forth

(2) Stocks and Bonds

Under this heading the Commission considered carefully the financing of the company The stocks issued; their selling price; the bonds issued, their kind, and selling price; and the promotion expenses incurred in marketing the company's stocks and bonds were all enumerated in detail. In other words, the whole problem of the financial organization and capitalization of the concern was thoroughly investigated.

(3) Revenues and Expenses

The evidence used here was merely a statement from the last annual report of the company on file with the Commission which presented in detail the operating expenses and operating revenues for the year ending June 30, 1912

(4) Original Cost

This term was defined by Mr Thelen as follows:

> The term "original cost" as used in this opinion, means the actual expenditures, in cash or its equivalent, by the railroad company for the physical elements entering into its operative property as of June 30, 1912, to which are added overhead expenditures for engineering, law, interest and commissions and similar items [10]

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[9] "In making findings in this case I shall not make a general finding as to the value of the property of this railroad Value is an elusive term, and what may properly be a value for one purpose may be entirely improper as a value for another purpose. I shall rather find specific facts bearing on the question of value, as shown by the evidence in this case, leaving it to the future to use these facts or such thereof as may be material in any proceeding in which these facts may become relevant. The fact that a finding is made on a particular matter is not to be taken as expressing the view of this Commission that that particular matter should enter into a consideration of the value of the property of this railroad company for any particular purpose. For instance, I shall find in this case that it cost a certain amount of money to sell the railroad company's stocks and bonds. In making this finding I shall not pass on the question as to whether this amount was a reasonable amount of money to expend for that purpose or whether this fact should be considered at all, in subsequent controversies affecting this railroad as to rates, the issues of securities, or in other matters. I shall content myself with finding the facts with reference to different elements which, properly or improperly, have from time to time been considered by the courts in cases in which the value of the property of a railroad company has been material."—*Ibid.*:780.

[10] *Ibid.*:783.

The engineering department of the Railroad Commission investigated carefully the original books of account of the railroad company and then followed this up by an examination of the original vouchers Certain discrepancies necessarily existed between the original cost as determined by the engineering department and by the railroad company itself Thus it was necessary for Mr. Thelen to determine from the evidence whether items belonged to original cost or to some other category, and what the correct amounts were. From this the total original cost was finally determined.

(5) Reproduction Value

Mr. Thelen defined reproduction value as follows:

> The term "reproduction value," as used in this opinion, means the estimated cost in cash of acquiring the operative right of way and other real estate and of reproducing in the condition in which it was acquired the other operative physical property of the Stockton Terminal and Eastern Railroad Company as of June 30, 1912, to which are added overhead expenditures for engineering, law, interest and commissions and similar items.[11]

In fixing the reproduction value of the right of way and station grounds, the Commission first ascertained their market value by using recent sales of property in the vicinity and the prices at which the land was held by its owners at the time of investigation, then it applied the multiple of 1 5 on the theory that it costs on an average one and one-half times the normal market value of abutting property to acquire right of way in country districts by purchase or condemnation for railroad purposes.

Estimates were then made of the reproduction cost of the rest of the plant. In addition to this, percentages were allowed under the heads of engineering, law, interest, and commissions. The item of engineering included an allowance for organization expenses, while the item of interest and commissions included primarily interest during construction, the engineering department assuming that it would have taken one year to reproduce the railroad and that all of the capital would have been tied up half of the time or half of the capital all of the time [12]

(6) Present Value

This term was interpreted as follows:

> The term "present value" as used in this opinion, means the "reproduction value" less the diminution in the value of the physical elements of the property, due to use, age, obsolescence and inadequacy. While this value may, under certain circumstances, include appreciation as well as depreciation, no appreciation is

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[11] *Ibid.*:785. [12] *Ibid.*:789.

found in this case. The term "depreciated reproduction value" may properly be used as alternative for the term "present value." It should be distinctly understood that when this Commission in this opinion and the engineering department in its estimates uses the term "present values," it is not intended to establish the ultimate fact of present value, as that term is ordinarily used, but rather the "depreciated reproduction value" of the physical elements of the operative property as of June 30, 1912.[13]

The engineering department of the Commission made a careful investigation into the average life and salvage value of the different classes of material and labor, using the straight line method of depreciation. The Commissioner found it necessary to make some additions to the estimate of the engineers in order to find the final present value of the railroad company.

In estimating the reproduction value of land in this case, Mr. Thelen used market value multiplied by 1.5. While he did not state just what was meant by market value it seems logical to interpret him as meaning the price that the land in question would fetch in the market for its highest present use other than for public utility purposes. At least this was the stand he took in the application of the *Marin Municipal Water District* for the Commission to fix the price it should pay for the property of the Marin Water and Power Company, when he said:

If I own land which is adapted to the raising of wheat, and that is its highest present use, a purchaser of that land will pay me for it in view of this use. If I have not sown the land to wheat, I will receive payment only for the land, in view of its uses. On the other hand, if I have sown the land to wheat and there is a crop of wheat standing on the land at the time of its sale, I expect to be paid not merely for the land, but also for the crop which I have raised thereon.[14]

It must be borne in mind that the theory of valuation held by the California Railroad Commission and discussed in the preceding pages is not considered in connection with the use to which the valuation is being put. All the Commission is concerned with under such circumstances is the determination of elements which go to make up the value—value being based not upon income but upon elements of cost either actually incurred, or hypothetical. Hence these elements are only guides to be used in finding what Mr. Edgerton called the true value of the utility, which true value will depend upon the circumstances of each particular case and the purposes of the decision.[15]

A case, important because it added considerably to the general theory of valuation, was that of the valuation of the property of the *Central Pacific Railway Company* between Mojave, Kern County, and

[13] *Ibid.*: 790. [14] 6 C. R. C. 507, 528. [15] See 7 C. R. C. 597, 607.

Owenyo, Inyo County, California.[16] This was one of the valuation cases brought on the Commission's own initiative to ascertain the facts which had to be considered in determining the value of the aforementioned railroad Two important contributions to the theory of valuation as previously discussed were made in this case: (1) in regard to original cost, (2) concerning land valuation

The Southern Pacific Company[17] estimated the original cost of the line at $5,530,169 62 while the engineering department of the Commission estimated it to be $4,357,216 01 The most important item of difference in the two estimates was in the charge against transportation of men and materials. The company billed all freight from points of origin to points on the operative portion of the line under construction at full commercial rates and charged a flat rate of 5 cents per passenger mile, on the line under construction, as cost of employees' transportation.

The Commission's engineers contended that all material sold by the Southern Pacific Company to its subsidiary companies should be charged out at *cost* with *no* profit added In the case in question the Southern Pacific Company sold transportation to itself at a profit, which profit became a charge to the capital account on which interest during construction was figured. The Commission maintained that this constituted a duplication of charges on all of which the company might ultimately claim a "fair return on the investment."[18] Hence it was decided that only the actual cost, fairly estimated, of transporting men and material should be included in the cost of construction work, and the commissioners presented several excerpts from Interstate Commerce Conference rulings, and accounting bulletins.

The second important contribution to the theory of valuation was that concerning the value to be given to the lands and right of way

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[16] 8 C R C. 640

[17] The road in question was owned by the Central Pacific Company but leased as a portion of that company's lines to the Southern Pacific.—*Ibid.* 644.

[18] *Ibid* .653 This section of the case concluded with the statement: "After a thorough consideration of the facts and of the law in this matter, we are of the opinion that it was improper for this company to charge to the capital account, under cost of road and equipment, any sums in excess of the actual cost in cash of transportation of men and material for construction purposes. We are further of the opinion that it was improper for the company to divert any earnings, and find that all earnings should have been credited to the cost of the road. It is, however, impossible at this time to determine what these earnings actually were.

"It appears to us that the importance of this matter is far-reaching. If carriers throughout the country are permitted to increase their capital investment figures by the charging of tariff rates on all new construction, addition and betterment work, and if the valuations of the common carriers now being made by the Interstate Commerce Commission are to be predicated on this basis and rates are to be made with this valuation as a foundation, the people of the United States will ultimately have to pay interest on hundreds of millions of dollars, not a cent of which will represent actual cost of property."—*Ibid.*:662.

of the company in estimating the reproduction cost. As we have already seen the Commission had previously used the "multiple" theory of land valuation in determining the cost of reproduction of the right of way. In June 1913, however, the United States Supreme Court in the *Minnesota Rate Cases*, 230 U. S. 352, disapproved of the "cost to reproduce" theory of fixing right of way valuations, and instead allowed only the market value of the lands in question, based upon the market value of similar lands in the community. The Public Utilities Commission of Washington changed its former valuations in accordance with this decision, and the Interstate Commerce Commission in its instructions concerning land appraisals omitted all reference to multiples.[19] While not committing itself to any theory of land valuation so far as rate-making was concerned, in finding the reproduction cost of the property in this valuation case, the California Commission followed the precedent set by the Minnesota Rate Cases and made no allowance for right of way multiple, interest, or other arbitrary allowances in placing values on the land.

So much for the general theory of valuation. As far as these proceedings are concerned, they were solely for the purpose of ascertaining figures which might be used by the Commission in deciding cases which required valuation statistics of any kind. No estimate of final value was placed on any of the property. In this respect there was a difference as compared with the Interstate Commerce Commission proceedings. Both bodies used the same methods of valuation, namely, the basis established in the Act of 1913. The federal authorities, however, while setting forth all the various items, have also made findings as to final value for rate-making purposes. The reason for the latter arose, of course, from the fact that a total valuation of railroads was required in order to determine the general rate level; while in California, on the other hand, it has been possible to deal with each case on its own merits and by itself.

The rate base.—

The foregoing discussion has presented the theory held by the California Railroad Commission in determining the physical valuation, or the "value" of public utilities in the state of California. However, when we come to the problem of the rate base which is actually to be used in regulation new difficulties enter in, and the elements which commissions and courts have decided must be con-

[19] *Ibid.*, :670. See also *Florida East Coast Railway Company and Atlantic and East Coast Terminal Company*, 84 I. C. C. 24.

sidered in determining value have to be viewed in the light of the purpose to which the valuation is to be put Thus valuation for rate-making becomes a special problem and amount in itself.

From the very beginning of its rate jurisdiction the California Commission took the stand that the prime measure of the rate base was to be the amount of investment, wisely made, in the property devoted to public use In *George A Legg vs Nevada County Narrow Gauge Railroad Company and Southern Pacific Railroad Company*[20] the complainant requested the authorities to abolish the transfer charge of 15 cents per ton on joint traffic moving over the lines of the respondent and to permit an advance in rates to points on the Nevada County Narrow Gauge Railroad In discussing the case the regulatory body laid down the principle·

"That before the Commission should permit an advance in rates it must appear that such an advance is necessary, in order to earn a reasonable profit from *the amount invested in the property*. . ."[21]

No idea, however, was given as to how the amount invested in the property was to be determined, but the direction in which the Commission was pointed was quite clear

The first opinion rendered which thoroughly discussed the problem of the rate base, and used physical valuation as one of the measures, was that given in the important case of *City of Palo Alto vs Palo Alto Gas Company*,[22] by Mr Thelen. This was a complaint brought by the city of Palo Alto attacking the rates of the Palo Alto Gas Company as unjust and unreasonable. After reviewing the history of the company Mr Thelen turned to the problem of the "proper value to be assigned for the purpose of this case to the Gas Company's property used and useful in the public service"[23] The various items to be considered in determining the valuation of the utility's plant were arrived at in a manner similar to that employed in the Stockton Terminal case.

The commissioner discussed the outstanding securities of the company and also such items of original cost as could be determined. The cost of reproduction new was computed by calculating what it would cost to produce a similar plant, as of the time of the case, and by adding to that amount "certain actual costs incurred in developing the business during its early stages, for which costs the utility is entitled to be reimbursed"[24] and which were termed "going concern

20 1 C. R. C. 11.

21 *Ibid.*:16; italics mine.

22 2 C. R. C. 300.

23 *Ibid.*:304.

24 *Ibid.*.310.

value" or "development costs" These were added on the theory that they were legitimately incurred by the investor and therefore he was entitled to a return on them. The next step in the procedure was to find the value of the plant in the condition as of the time of valuation or, cost or reproduction new less depreciation.[25] The various figures arrived at were then estimated as to importance (although the weight given to each was not stated in the decision), and the rate base fixed accordingly. The final amount determined by these calculations constituted fair value for rate-making purposes. As authority for this action Mr. Thelen quoted *Smyth vs Ames*, 169 U S. 466 (546).

It will be noted that in determining the rate base in this case the estimated cost of reproduction new of the property less depreciation, or the present value of the property was used principally Little account of original cost was taken because the evidence on this point was considered unsatisfactory[26] The *inference* to be drawn from the decision, however, was that prudent investment was the goal of the Commission, and the final figures were calculated to reflect that fact.

This stand was reaffirmed in *James A. Murray and Ed Fletcher* who asked for an increase in the water rates charged by them in the county of San Diego.[27] This case was passed upon by Commissioner Eshleman who cited as precedents, *Smyth vs Ames* and *Palo Alto vs. Palo Alto Gas Company*. He also quoted *San Diego Land and Town Company vs. Jasper*, 189 U S. 439, which stated that the price at which a plant has been bought at a foreclosure sale was *evidence* to be considered in a rate-fixing inquiry[28] So far nothing new was added to the theory of rate-making. Mr. Eshleman did not stop at this point, however. He definitely laid down the principle that the "value" upon which the return was to be allowed was the *amount of investment wisely made*, and interpreted the latter elusive phrase in the light of the *Jasper Case* (189 U. S. 438) which stated:

"If a plant is built as probably this was for a larger area than it finds itself able to supply, or apart from that it does not as yet have the customers contemplated, neither justice nor the constitution require that say two-thirds of the contemplated number should pay a full return."[29]

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[25] It should be noted that, in the discussion of these decisions, we are using the term "value" not in the economic sense but as used by the authorities.

[26] *Ibid.*:305.

[27] 2 C. R. C. 464.

[28] *Ibid.*:504.

[29] *Ibid.*:511, 519. See also *Redding vs. No. Cal. Power Co.*, 11 C. R. C. 37; *Copeland Water Co.*, 20 C. R. C. 758.

Consequently, he scaled down the value of the plant to what he considered a necessary investment in order to supply the customers then being served.

It was estimated that it would cost $483,134 00 to reproduce the property depreciated to its present condition, but only $352,500 50 was allowed as the rate base. This was done on the theory that the latter figure represented the fair value of the property devoted to the public service. It was quite evident from the decision that Mr. Eshleman interpreted fair value for rate-making as meaning the estimated actual prudent investment To this theory the California Commission committed itself and it has remained true to it down to the present

Moreover, the California authorities accepted this theory even where the Interstate Commerce Commission thought the rate base approach was inapplicable This was the stand taken in the investigation by the Commission on its own initiative of the *Wells-Fargo express rates.*[30] The interest in this case arises from the fact that the Wells-Fargo Express Company was engaged in both intrastate and interstate business First of all it was definitely decided that express rates should be determined by the investment theory,[31] contrary to the attitude of the Interstate Commerce Commission.

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[30] 3 C. R C. 228.

[31] 3 C R C 228, 230. *In re—Express Rates*, 24 I C C. 380, the Interstate Commerce Commission, in reference to the basis upon which the return should be earned, stated "From these considerations it appears quite evident that the foundation of a reasonable rate can not be the return upon the property of the express company as such, no matter how offensively large or absurdly small this may appear to be when calculated from the balance sheet" And again: "A reasonable express rate may not be fixed upon the basis of the value of the property owned and used by the express company." The reason given for this attitude was that railroad property gave the greater part of the service, and that this property would have to be considered if the valuation basis were used Consequently, this method of regulation was rejected In fixing the rates the I. C. C decided that, among other things, the following should be considered:

(1) The express companies should meet the needs of the public

(2) They should not charge more than the railroad would for rendering a similar service.

(3) They should receive a reasonable compensation for the service rendered

The attitude of the I C C. was obviously quite inconsistent. If valuation is used in one case it should be used in another. The second factor gives the game away completely for if the railroads were rendering the service they would be allowed to charge only those rates which would give a fair return on the property used. Certainly the California authorities were much more logical. In commenting upon the above quotations the California Commission had this to say:

"With this statement we do not at all agree, and from an analysis of the very able opinion rendered by the Interstate Commerce Commission we believe that this statement is directly at variance with one of the findings in said case to the effect that 'in the fixing of its rates an express company should not be allowed to charge more than a railroad if the latter undertook to and did give the same service.' With this latter expression we are in hearty accord."—3 C. R C. 228, 230.

In ascertaining the rate base upon which rates on intrastate business were to be determined the Commission took the appraisals of the agents of the company (the commissioners did not pass specifically upon the value of the property of the defendant) as showing the present value of its property in California. Then this sum, namely, $714,257.24 was apportioned between interstate and purely intrastate business on the basis of 76.84 per cent to California purely intrastate business, or $548,835.26 and 23.16 per cent to California interstate business, or $165,421.98. The Commission calculated these percentages by carefully examining the work of the express company during the year 1911 and finding the ratio of the number of parcels handled in interstate business in California, to the number handled in purely intrastate business.[32] By methods similar to that outlined above the expenses of the express company were assigned as between intrastate and interstate business. It does not seem necessary to go into the details of this, but one example will be given to show the procedure followed. To quote from the decision:

> The next item is depreciation and repairs of refrigerator and ventilator cars. It is urged by the company that the proportion of the time these cars are in California out of the year will give a proper percentage to be charged to California state and interstate business. Adopting this method of apportionment we have $1,168.62, as the expense chargeable against this account and assignable to California state and interstate business. Apportioning this on a piece basis between California interstate and California state business, as urged by the defendant, we have intrastate expense for the two months of $897.97 or $5,387.82 for the year.[33]

Having found the rate base for and the expenses due to California purely intrastate business, it was a simple matter for the authorities to prescribe rates which were calculated to give a fair return on the value of the property of the express company devoted to this business.

The conflict of the investment theory with the valuation of land in determining the rate base was given consideration in the application of the *North Coast Water Company* for an increase in rates.[34] Mr. Thelen here expressed the opinion that the amount upon which a utility should be allowed a fair return was "the moneys reasonably and properly expended in the acquisition and construction of its works actually and properly in use to carry out its agency—no more and no less." In support of this stand he quoted Mr. Justice Van Vleet in *San Diego Water Company vs. San Diego*, 118 Cal 556, 572,

[32] *Ibid.*: 250.

[33] *Ibid.*: 239.

[34] 3 C. R. C. 962. See also 4 C. R. C. 902.

to the effect that: *"It is the money reasonably and properly expended in the acquisition and construction of the works actually and properly in use for that purpose which constitutes the investment on which the compensation is to be computed."*[35]

The chief difficulty which the Commission faced in fixing the rate base in this case was in ascertaining the value to be ascribed to the lands used by the utility. In 1904 the land had cost $44,093.70 while at the time of the case (1913) $96,964.00 was claimed by the company, the difference, according to Mr. Thelen, being due to what the public calls unearned increment. The problem presented here tested, in the mind of the commissioner, the present value theory as compared with the original cost or investment theory He considered that the lands had been devoted to public use and what the owner was entitled to a fair return on, was the money reasonably and properly expended in their acquisition. In his opinion, this doctrine worked equally well both ways, that is, when there is depreciation in land values as well as when there is appreciation. Consequently he pronounced himself very decidedly in favor of the investment theory as opposed to the reproduction value or present value. Unfortunately, it was not necessary for him to pass on the question of whether or not the applicant was to be allowed a return on the greatly increased value of its land, but he stated very plainly what his attitude was. He did not consider that the present value or reproduction value theories sprang in any way out of the fundamental relationship between the public and its utilities The use of either of these theories might be as unjust to the public as to its utilities according as prices rose or fell. Therefore he concluded that the investment basis was the only sound one for rate-making

This decision showed clearly that the Commission was not bound by the "present value" of a public utility in fixing rates This was only one of the elements used in determining what the base ought to be. It was conceivable that the "present value" might be quite different from the money actually expended in acquiring property. Moreover, it should be noted, cost of acquisition may differ considerably from reasonable cost of acquisition, or "fair value." For example, in the *Application of the City of San Diego* for the Commission to establish the rates which the city should charge to consumers outside its limits, Mr. Thelen arrived at the rate base according to the usual procedure, including an item for developing the business,

[35] 3 C. R. C. 962, 967.

which in this case consisted of an allowance for the deficit below a fair return during the developmental period.[36] But the commissioner then stated that consumers could be expected to pay rates only on such value as might be found to be a fair value regardless of what it cost to acquire the system His remarks are worth quoting:

> While, if the City of San Diego desires to pay the sum of four million dollars, or any other sum for this system it certainly has the right to do so in so far as this Commission is concerned, it does not necessarily follow that it has the right to charge any such sum as it pleases which it may pay as against its outside consumers, who are not parties to such an arrangement, and who have the right to expect to pay rates on only such value as, in view of all the facts of the case, may be found to be a fair value for rate-fixing purposes.[37]

This was quite consistent, moreover, with the opinion expressed in re—*The Rates and Practices of the Eastside Canal and Irrigation Company*.[38] This concern had been forced to expend enormous sums in litigation in defending its rights to take water from the San Joaquin river. The Commission would not allow the company to place any of this burden on its consumers on the theory that:
"We believe that at least this much responsibility in this regard rests upon the public utility: That it produce property at reasonable cost and reasonably secure as to title and possession and that if it do less than this, it must bear the loss."[39]

The determination of the amount to be allowed as the rate base always gives rise to the problem of "going-value." Where fair value is fixed according to the investment theory, obviously going-value must represent actual and reasonable sacrifice This problem was dealt with at length by Mr. Thelen in a consolidation of cases concerning the practices of the *San Joaquin Light and Power Corporation*.[40] In estimating the rate base the utility company claimed a minimum of $1,651,021.00 as representing the corporation's going-concern value. This figure was arrived at on the assumption that the business had a going-concern value at least equivalent to its cost of development. The corporation based its conclusions upon the history of the sale of

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[36] 4 C. R. C. 902

[37] *Ibid.*, 923. The idea here, of course, is that prudent investment is the controlling factor. But see footnote 24, chapter 6, regarding control of municipally owned utilities.

[38] 4 C. R. C. 597.

[39] *Ibid.*, 604. Mr. Eshleman has also said:
"Justice dictates that the sacrifices of those who serve us should at least be rewarded, and hence what has been paid out by a utility should appeal strongly to us."—*Town of Antioch vs. Pacific Gas and Electric Company*, 5 C. R. C. 19, p. 73, concurring opinion of Mr. Eshleman.

[40] 9 C. R. C. 543. This decision was upheld by the Supreme Court of California. See *San Joaquin L. & P. Corp. vs. R. R. Com. of Cal.*, 175 Cal. 74 (1917).

electric energy An allowance of 8 per cent return on the investment, together with the actual operating expenses and an item for depreciation based upon the 4 per cent sinking fund method, was made. Each year the accumulated deficits of preceding years were added to the investment until all deficits were wiped out. No allowance was made for the surplus of later years to counterbalance the deficits of earlier years The accumulated deficits were added together and assumed to represent the cost of developing the business

The Commission demonstrated, however, that the San Joaquin Company had not only earned 8 per cent on its investment and accumulated deficit, but had had sufficient over and above this to wipe out the deficit and still have a corporate surplus of $785,158 50 [41] Consequently, Mr Thelen decided that when the earnings of later years have entirely wiped out the deficits of earier ones, no allowance would be made for going-concern value This attitude discredited the reproduction cost new theory as applied to going-concern value. To quote from the decision:

> If consideration is given primarily to the actual investment in the property as the basis on which a rate of return is calculated, there is, of course, no ground whatsoever for any allowance in such a case, for the reason that the utility has earned a return on every dollar invested and has wiped out every dollar of deficit On the other hand, if consideration is given primarily to the reproduction cost new theory, this would appear to be another case in which this theory produces results most unfair and unjust to the public. If the rate payers have paid to the utility a revenue sufficient to wipe out all the deficits incurred during the early years of operation, in addition to a return of 8 per cent on all accumulated deficits as well as on the money actually invested, what reason is there in logic or in equity why the utility should demand a return in excess of the amount properly allowable for its tangible properties? If the utilities are successful in such claims, they will compel the ratepayer to pay twice under the same head, first to wipe out the deficit of the early years and then to continue paying a return on the amounts represented by such deficits before they were wiped out. This would be a heavy price to pay to vindicate the reproduction cost new theory [42]

This decision evidently confirmed the stand of the California Commission, namely, that investment rather than reproduction cost was to be taken as the rate base.[43]

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41 *Ibid.*, 583 42 *Ibid.*, 583.

43 In support of his stand Mr. Thelen cited.
Des Moines Gas Co. vs. Des Moines, 238 U S. 153,
Cedar Rapids G L Co vs Cedar Rapids, 223 U S. 655,
Cumberland Tel and Tel Co vs. Louisville, 187 Fed 637, 646;
Spring Valley W W. vs S F, 192 Fed. 137, 167;
Montana W. & S. R. Co vs. Bd. of R. C. of Montana, 198 Fed. 991;
Contra Costa Water Co. vs. Oakland, 159 Cal. 323, 113 Pac. 668;
Kings Co. L. Co. vs. Willcox, 210 N. Y. 479, 489.

Throughout its entire history the Commission has adhered to the above theory. When actual expenses have been incurred in developing a utility business, when these have been legitimate, and when definite proof has been established, they will be allowed by the Commission. Moreover, the amount will also be allowed by which a fair return during a reasonable developmental period has been lacking, if there are no offsetting items such as income above a fair return at subsequent dates No definite time has been established as a reasonable one for development, the authorities viewing each case on its merits. As a general rule, however, five years has been taken as a maximum Finally, it should be noted that the investment upon which these developmental costs or deficits are calculated must be adjudged as reasonable.[44]

Valuation and Price Changes

During the years prior to the tremendous price upheaval resulting from the world war, the question of which theory was to be used in estimating the rate base was not of such vital importance because, owing to a fairly stable price level, the results obtained in any case were quite comparable Two influences tended to force commissions to attach considerable weight to the reproduction cost theory: one was the decision of the United States Supreme Court that land appreciation must be allowed; the other was the fact that in most instances the commissions were estimating the rate bases at a time when the concerns were in operation and investment figures were practically unobtainable. The war, however, brought about a revolution in prices and forced the issue sharply to the front. The effect on the regulating authorities was to cause them to take ground on the investment basis or historical cost. Where actual cost figures from the commencement of the enterprise were not obtainable, the authorities used the valuations made in previous years and added the actual capital expenditures incurred subsequent to those estimates Where no valuation had been made and actual investment was not ascertainable the commissions and courts found it necessary to devise ways and means to avoid the effects of price inflations. This was usually done by taking unit prices, which were obtained by averaging prices of materials for a period of years preceding the investigation.

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[44] See: *City of Monterey vs Coast Valleys Gas & Elec. Co.*, 4 C. R. C 1366; *Town of Antioch vs. P. G. & E. Co.*, 5 C. R. C. 19; *City of Santa Monica*, 7 C R. C. 400; *Southern Sierras Power Co., et al.*, 18 C. R. C. 818; *Pacific Gas & Elec. Co.*, 22 C. R C. 744. Also *City of Milwaukee vs. Milwaukee E. R. & L. Co.*, 10 Wis. R. Com. 1, 122; *People vs. Willcox*, 14 N. Y. 677.

The attitude of the California Railroad Commission toward, and its use of, the historical cost as the fair value upon which rates should be based is illustrated by the case concerning the *Joint Application of the Southern Sierras Power Company and Holton Power Company* for a revision of rates, which was decided on September 16, 1920.[45] The applicants contended that their rates should be based upon the estimated reproduction cost less depreciation, or the "present value" of the properties. The commissioner, Mr. Brundige, was not at all in sympathy with this contention, and maintained that a utility corporation was entitled to a fair return only on *its reasonable historical cost*. He asserted that a utility must meet the demands of the public regardless of whether costs are high or low and that if present values were to be used as a basis, confiscation of the property of investors would obviously result if investments were made under high prices and then the price level were suddenly to fall. Under reverse circumstances the results would be unfair to consumers. Hence, he argued, historical cost was the only fair basis.

If "present values" be regarded as the proper rate base during periods of high prices, it should likewise be so regarded during periods of low prices and rates reduced accordingly. Under present conditions applicants might reap a temporary advantage were this suggestion followed. Applicants, in the past, have depended, and in the future will probably depend, largely upon borrowed moneys for their development. The present developments made at large cost might readily, under the "present value" basis, shrink in "value" to an amount below that of the bonds outstanding and cause either a period of temporary inability to develop or an actual failure, with the accompanying difficulties and losses. The return allowed a public utility should be placed upon a more certain basis than that suggested. The amount invested in public utility properties, if known, or if not known, the historical cost of the property, should be regarded as the principal element in arriving at a rate base.[46]

Following this Commissioner Brundige then proceeded to lay down a doctrine which, if followed to its logical conclusion, would present any regulating body with some very serious problems:

I must conclude, therefore, [he said] that the applicant is entitled to a fair return upon its reasonable historical cost rather than upon its so called present value. In arriving at this conclusion it is not contemplated that a utility should not be entitled to certain economies where it can be shown that its judgment and foresight have resulted in the same. Should a company develop its plants during a period of low prices, when the same were not necessarily needed, and these developments become useful during a later period of high prices, it should be entitled to certain of the benefits of its foresight. On the other hand, allowance for historical investment should not be blindly followed in case a utility has

[45] 18 C. R. C. 818.

[46] *Ibid.*:832. See *Re—rates of Southern Calif. Tel. Co.*, 33 C. R. C. 812, 814, for an illustration of reproduction cost that is less than reasonable historical cost.

unreasonably delayed in its obligation to the public by failing to develop plants at a time when they should have been developed and later constructing them under conditions of high cost of money and material. In such a case, fairness to the consumers must dictate a lesser compensation to the utility.[47]

If any commission were to follow this as a precedent it would obviously have to discard the investment theory. It would at once become incumbent upon every regulatory body to decide just when improvements had been necessary in the past, and to determine the price level and cost of construction at that time. This might readily give a figure entirely different to the actual reasonable investment To be consistent commissions should also use the same policy in cases where the utilities postponed construction, even though it were actually necessary, because of unusually high costs, and carried out the additions and betterments when the price level had fallen It is safe to say that no regulatory body would do this, and this very fact shows the impossibility of accepting such a theory.

The problem of price changes and their relation to the rate base was squarely faced in the application of the *Pacific Gas and Electric Company* for an order authorizing it to increase its rates and charges for electric energy; and a number of complaints against the said company by various interested parties; decided December 30, 1922, by Commissioner Rowell.[48] This was the first time that the entire question of the value, operating expenses, and rates of the combined electrical production, transmission, and distribution system owned and operated by the Pacific Gas and Electric Company had been presented for consideration.

The company claimed that the appraisal should be based upon the average prices of the five-year period 1915 to 1919 with subsequent additions and betterments at cost On the contrary the cities served by the company vigorously opposed such a method of computing a fair value for rate-making as being grossly unfair.

Commissioner Rowell decided that the fundamental basis to be used in ascertaining the rate base was the estimated reasonable historical cost. This would give a stable basis of valuation which he considered would make for greater security of investment and hence benefit both consumers and investors. A fluctuating reproduction cost might work to the advantage of investors in times of high prices, but would have the reverse effect under low prices. A rate base estimated on high prices might conceivably work to the disadvantage of the

[47] *Ibid.*: 832. [48] 22 C. R. C. 744.

utilities, since the rates as constructed might be so high as to drive customers away. This stand was quite in accordance with the policy of the Commission for the preceding ten years. Mr Rowell contended that the changing price conditions and the very satisfactory financial position of the utilities had confirmed the wisdom of the regulatory policy of the California authorities Accordingly, he accepted the estimated reasonable historical cost as the controlling factor in arriving at the proper basis of rates It is to be understood that this method was used instead of the actual investment simply because records were lacking by which the latter figure could be determined accurately.

Historical cost, however, was not taken as the basis of land values entering into the rate base, for previous decisions of the Commission, and the ruling of the United States Supreme Court in the Minnesota Rate Cases, called for the valuing of lands according to their present market value as of the time of the proceedings. Hence we have here the anomaly of a rate base consisting partly of historical cost or estimated reasonable investment, and partly of present value The regulatory body could hardly be blamed here, however, since it was valuing land according to the dictates of the Supreme Court of the United States, and not according to its own theory

The sum to be assigned to water rights was ascertained in a similar way, estimates being made as to what it would cost the company to secure its water rights were it required to do so at the time of the proceedings No allowance was made for going-concern value because it was demonstrated that deficits incurred in the early history of the company had been wiped out by the surplus of later years

The decision in this case then was in entire accordance with the previous attitude of the California Commission and set at rest, as far as the authorities were concerned at least, the proper basis for fair value after the price upheaval of the great war and the period following its conclusion.

The final case which we shall discuss in this section is that concerning the application of the *Western States Gas and Electric Company* for an increase in its electric rates in its Stockton division.[49] No valuation of the properties of this company had previously been made and so the Commission was forced to make its estimate in 1923. The authorities endeavored to obtain as nearly as possible the probable historical reproduction costs of the properties of the company

[49] 24 C. R C. 677.

used and useful in the public service In making this valuation the Commission based its calculations upon an average of prices for the ten-year period from 1912 to 1921. The items considered were similar to those used in decisions previously discussed and the actual figures obtained really represented a present reproduction cost based on a ten-year price level In obtaining labor costs the authorities took the costs ascertained in a previous decision for the Pacific Gas and Electric Company. Using these as a basis of comparison the Commission added 10 per cent to arrive at a reasonable cost of construction for the Western States Company. This was done in order to give due weight to the increased labor costs of 1920 and 1921, which were not considered in the appraisal of the Pacific Gas and Electric Company

That the "fair value for rate making" obtained by this method was quite different from what it would have been if the "present value" as of the date of the proceedings or the "present value" of 1912 plus additions and betterments subsequently made, is obvious at once. The Commission faced a very real difficulty in the fact that it was making a valuation of this company for the first time at a period when prices were high as compared with the pre-war period. Had it used the "present value" basis as it had done before the price change, the result would obviously have been unfair both to the companies whose original valuations had been made at an earlier date, and to the consumers of the service of the Western States Gas and Electric Company as compared with those of other utilities. The use of the "present value" in this instance would evidently have aroused a storm of protest from other corporations and would have necessitated a revision of all their rate bases. The authorities asserted that they were endeavoring to obtain a rate base as close as possible to the historical cost figure. Theoretically, then, this case presented no inconsistency in the attitude of the Commission; reasonable investment was the amount on which the utility was entitled to a fair return.[50]

Throughout a period of more than seventeen years the California Commission has been unanimous and consistent in its adherence to the prudent investment theory as being the only sound theoretical basis upon which a fair return can be prescribed. Whether we agree

[50] For subsequent cases confirming the above stand see: *Pomona Valley Tel. and Tel. Union*, 30 C. R. C. 606; *Imperial Valley Utilities Corp*, 31 C. R. C. 539; *Re-rates Foothill Ditch Co.*, 32 C. R. C. 44. In *L. A. Ry. Corp.*, 31 C. R. C. 383, historical cost was used in determining the base, but the Commission took pains to note that it had given consideration to cost of reproduction according to legal requirements.

with the theory or not we must praise the authorities for their consistency. Utilities operating within this state at least know where they stand. On the theory of the rate base the Commission has not yet met defeat in the courts.

The accomplishments of the Interstate Commerce Commission have been less gratifying and less definitive In the first place, this body has not taken a firm stand on any theory, although everything indicates that it has really endeavored to employ the investment method Its final valuations are based on the cost of reproduction as of 1914, at unit prices based on 5- and 10-year periods prior to that time plus additions and betterments since then at cost [51] In the second place, the courts have injected an element of serious doubt. In *St. Louis and O'Fallon Ry Co., et al , vs United States*, 279 U S 461, the court upheld the protest of the carriers against recapture measured by the rate base submitted by the Interstate Commerce Commission The court contended that the Commission had not given due consideration to all questions of value as required by the Valuation Act. Unfortunately the court failed to settle the fundamental issue in valuation, the result is a stalemate The outcome, time alone can reveal

In dealing with cases affecting public utilities and state commissions the United States Supreme Court has in recent years followed a line of reasoning which leads to the conclusion that it is upholding the cost of reproduction theory, essentially at current prices. In *McCardle et al. vs Indianapolis Water Co*, 272 U S. 400, Mr Justice Butler said.

> It is well-established that the values of utility properties fluctuate, and that owners must bear the decline and are entitled to the increase [at 410] . . . it is true that, if the tendency or trend of prices is not definitely upward or downward and it does not appear probable that there will be a substantial change of prices, then the present value of land plus the present cost of constructing the plant, less depreciation, if any, is a fair measure of the value of the physical elements of the property. [at 411]

Further support to the cost of reproduction theory was given in the recent *Baltimore Street Railway Case*, although valuation was not an issue here. In reference to depreciation the court said:

"This naturally calls for expenditures equal to the cost of the worn-out equipment at the time of replacement; and this for all

[51] See Vanderblue and Burgess, *Railroads, Rates, Service and Management*, chap. 23; Vanderblue, H. B., *Railroad Valuation*. The I. C. C. valuation figures have been severely criticized on the grounds of artificiality. In this respect the results of the California body seem less open to attack.

practical purposes means present value It is the settled rule of this court that the rate base is present value.''[52]

The definite stand of most of the commissions on the side of the investment theory has been due, to a considerable extent at least, to expediency and public pressure. Many utilities, on the other hand, have advanced cost of reproduction in theory, but have refused to request a return on this base because of the effect of such rates on their business. In interstate commerce the theory is useful to the railroads not because of the influence on rates but because of the recapture clause. The present downward trend of the price level is, however, already causing a shift in ground and one wonders how the courts and utilities will meet this change Without holding any brief for either theory, it may be stated that if a rate base is to be used in fixing fair rates, then certainly investment is the sounder approach.[53]

[52] The *United Railways and Electric Company of Baltimore vs H. E. West et al.*, 280 U. S. 234, 254 (1930). See also. *State ex rel Southwestern Bell Telephone Co vs. Public Service Commission of Mo.*, 262 U. S. 276 (1923); *Bluefield Waterworks and Improvement Company vs. Public Service Commission*, 262 U S. 679 (1923). See dissenting opinions of Mr. Justice Brandeis and also his decision in *Georgia Railway and Power Company vs. Railroad Commission of Georgia*, 262 U. S. 625 (1923). See Pegium, D. F., *op cit.*, for a discussion of the attitude of the Supreme Court, and Mosher, W. E , *Electrical Utilities*, for a slightly opposite view.

[53] See. Jones, E., *Principles of Railway Transportation;* Bonbright, J. C., ''The Economic Merits of Original Cost and Reproduction Cost,'' *Harvard Law Review*, 41.593 (March 1928); ''Railroad valuation with special reference to the O'Fallon decision,'' *A. E. Review*, 18:181 (supp. 1928).

CHAPTER III

FAIR RETURN

INTRODUCTION

After the rate-making authorities have fixed the sum upon which utilities are entitled to earn a fair return, it becomes necessary for them to prescribe rates which will yield this return after all expenses have been met Hence, commissions and courts are forced to solve a twofold problem.

(1) What constitutes a fair return,

(2) What are the actual costs of running the business, or perhaps we had better say, what *ought* they to be

By fair return the commissions and courts simply mean what the owners of utility properties are legitimately entitled to expect as their reward for the supplying of service This reward is supposed to pay for all money invested regardless of its source: interest on bonds, for example, is paid out of the fair return Consequently, so far as the public is concerned, the interest paid by a utility corporation on money borrowed does not constitute a separate item of expense since it is included in the fair return allowed

FAIR RETURN ON FAIR VALUE

Since the case of *Smyth vs Ames*, 169 U. S. 466, the rate of return has constituted a problem whose solution still baffles courts, commissions, and legislatures. It is today one of the most, probably the most controversial subject in public utility regulation The difficulty arises from the fact that the theory underlying utility legislation and control is twofold: it has both a legal and an economic aspect The constitution of the United States forbids the taking of property without due process of law and it is the function of the courts to set the standard by which "confiscation" may be measured. They have decided, accordingly, that public utilities are entitled to a "fair return on a fair value." Unfortunately, scarcely a working definition of this term has been given.

The issue before the commissions, on the other hand, is not one of fixing a legal minimum to income, but rather the setting of a rate level which will make for sound public utility business. Viewed in this aspect the question is fundamentally economic, and in theory at least, the idea of an economically fair return is that it is the income necessary to induce capital adequate to meet public demands (and reasonable, anticipated demands) for service.[1]

The following discussion treats of the way in which the California Commission has dealt with the concept of a fair return.

In the case of *Palo Alto vs Palo Alto Gas Company,* Mr. Thelen laid down the principles which, in the mind of the Commission, should govern the rate of return which a utility is entitled to receive. He stated that there is no one fixed rate, but that it must vary according to the circumstances of the case. Thus, as we shall see later, utilities whose business is unstable, owing either to the nature of the service supplied, or to surrounding conditions, have, where possible, been granted higher returns than others in more favorable circumstances; and as the stability of the utility has increased the return allowed has tended to be lower. Mr. Thelen, in the case in hand, said that it would be the policy of the Commission to be liberal, in order to encourage development in California. To quote:

> No fixed percentage applicable to all cases and all classes of utilities can be established by this Commission. Each case must be judged on its own merits. It may well be that a utility in one community would be entitled to one rate of return while a similar concern in another community would be entitled to a different rate It may be that a large and solidly established utility will not be entitled to as high a return as a smaller utility which is struggling against adverse circumstances. The most that can be said by way of general principles is that the return should be at least the average return which is earned by other classes of business of the same degree of hazard in the same community The Commission in fixing a rate of return must be liberal, lest too strict a policy result in turning capital to other fields of enterprise. California needs development by public utilities, and this Commission's policy should be a broad and liberal one, so as to encourage capital to develop the State by legitimate public utility enterprises where needed The Commission should be careful not to permit an inflation of prices in ascertaining the value of the property of a public utility used and useful for the public purpose, but should be liberal in establishing the rate of return on that value. Bearing in mind all the facts of this case as shown by the evidence, I find that a rate of return of 8 per cent on the value of the property of the Palo Alto Gas Company used and useful for the public purpose, as fixed herein, is at least a fair and equitable rate of return. If anything, the rate is too high by reason of the fact that the Commission has been more than liberal in establishing the "basis of value."[2]

[1] *Western States Gas & Elec. Co.*, 24 C. R. C. 677, 690.

[2] 2 C. R. C. 300, 317. Cf. *Willcox v. Cons. Gas Co.*, 212 U. S. 19.

In connection with the above it should be noted that the principles of fair return and fair value were treated as being quite interrelated and if one was set at a high figure, the other was to be relatively low [3] Unfortunately, as regulatory practice became established these two principles tended to become independent The dilemma of today is the result "Robbing Peter to pay Paul" seldom leads to a panacea for business problems

A new idea was added to the Palo Alto case in *Town of Antioch v. Pacific Gas & Electric Company.*[4] Here the commissioner in charge, Mr Thelen, went into the question of a fair return very carefully and opened up an excellent avenue of approach by examining the financial structure in order to decide upon the income to be allowed. In this instance the complainant alleged that the rates of the defendant company were unjust and exorbitant, and asked the Commission to prescribe just and reasonable ones In dealing with the problem of the rate of return the company was entitled to, Mr Thelen quoted court decisions, and also *City of Palo Alto vs Palo Alto Gas Company*, 2 C. R. C 300, to prove that the rate of return that should be allowed in utility rate-fixing cases could be no definite amount, but, on the contrary, one that would vary with the circumstances, and which in each case, should be sufficient to induce capital to come into the field. "It would seem that in general the rate of return should be such rate as is high enough to secure the funds for the development of the business, and that in reaching its conclusions on this point, the Commission should be liberal in its attitude "[5] The actual rate allowed in this case was 8 per cent and Mr Thelen emphasized that this was larger than was necessary to secure all the company's capital, from the sale of both stocks and bonds [6] He made this decision after a study of the cost of money to the company, in which he found that interest was being paid by the Pacific Gas and Electric at the rate of 5 per cent on thirty-year bonds, sold at 85 per cent of their face value, and that preferred stock at 6 per cent was selling at 82 5 per cent of par. From this he decided that the allowance of 8 per cent return was $1.425 more than was necessary on each $100 invested He reached this conclusion by assuming that in a *normal* case a utility secures $75 through the sale of bonds and $25 through the sale of stocks for every $100 raised; hence he maintained that a return of 8 per cent was a very liberal allowance.

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[3] See *So. Cal. Tel. Co.*, 25 C. R. C. 721, 755.

[4] 5 C. R. C. 19. [5] *Ibid* :42 [6] *Ibid.*:55.

The procedure here adopted should be commended in that it endeavored to correlate the return with financial requirements. However, the *actual* financial needs of the company were not carefully determined nor was any attention paid to the financial structure and the earnings which the stockholders were receiving. Unfortunately, the method of this case was not followed nor elaborated upon in later decisions. At bottom the difficulty seemed to arise from the desire to establish some average rate of return for normal cases, and the propensity in later cases to follow earlier precedents.[7]

As already explained, the California Commission has asserted many times that there is no one rate of return which is reasonable per se. Broadly speaking, however, a fair return usually centers around 8 per cent. In instances where the hazards are extraordinary, or where other unusual circumstances enter in, a somewhat higher return may be granted. But a clear case must be made out by the utility if it is to receive over 8 per cent.[8] On the other hand, where the utilities have become well established the authorities have lowered the rate somewhat, usually to about 7.5 per cent. The theory here, of course, is that reduction in risk, greater stability, and ability to finance at lower rates, warrant a lower return.[9]

We should pause to remark that these percentages are not to be considered as the average level of fair return to a utility over a period of years, but only the return as of the time of the investigation. For example, in re *Rates of Southern California Telephone Company*,[10] the Commission stated:

> During the years 1922, 1923 and 1924 it operated at little or no return but, following the rate increase authorized by Dec. No. 14420, the earnings of Southern California Telephone Company steadily increased until it earned in 1928 and will earn in 1929, in excess of a 9 per cent return on a reasonable rate base. The earnings for the entire period, 1922 to 1929, based on analysis by Commission engineers, will, however, average less than 6½ per cent return.[11]

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[7] See Pegrum, D. F., "Legal v. Economic Principles in Valuation," *Jour. of Land and Pub. Utility Econ.*, 6:127–135 (May 1930); Bickley, J. H., "A Fair Return for Public Utilities," *ibid.*, 3:61–70 (Feb. 1927); Dozier, H. D., "Reasonable Rate of Return in Public Utility Cases," *ibid.*, 71–76 (Feb. 1927), "Present Reasonable Rate of Return of Public Utilities," *ibid.*, 4:235–242 (Aug. 1928); Glaeser, M. G., *Outlines of Public Utility Economics*, chap. 19, see also 19 C. R. C. 595 at 601.

[8] See *Valley Natural Gas Co.*, 9 C. R. C. 203, 206: "A natural gas enterprise is of a peculiar and speculative nature and a return of 10 per cent has been held not unreasonable"; also *So. Counties Gas Co.*, 19 C. R. C. 960; 20 C. R. C. 402, *L. A. Gas & Elec. Corp.* 20 C. R. C. 93; *Golden Gate Ferry Co.*, 28 C. R. C. 317; *Fairey v. Heck Bros.*, 32 C. R. C. 367.

[9] See *So. Cal. Tel. Co.*, 25 C. R. C. 721; *L. A. Gas & Elec. Corp.*, 29 C. R. C. 164, 184, "In recent cases involving large gas or electric companies the commission has considered as reasonable, rates of return of 7½ to 8 per cent." Also *Ventura v. So. Counties Gas Co.*, 32 C. R. C. 477.

[10] 33 C. R. C. 812. [11] *Ibid.*: 814.

A reduction in rates was ordered, so that, it was estimated, the earnings would be between 7 and 7½ per cent for the ensuing period.

A good summary of the general attitude that the Commission has assumed during its existence as a public utilities commission was given, on the Commission's own motion,[12] in re *In the Matter of the Investigation of the Electric Rates, Service and Operation of Coast Counties Gas and Electric Company* Mr Martin, commissioner in charge of the case, summed up the situation as follows

> The proper rate of return to be allowed upon this rate base cannot be determined by any mathematical calculation. A reasonable rate of return is one which, when applied to a group of utilities, with due allowance for the special conditions involved in each case, will be sufficient to encourage the investment of requisite additional capital to enable the business as a whole to expand and keep pace with the demands upon it The financial requirements of each individual concern enter into this consideration only as they affect the whole and as they indicate special circumstances which must be given weight.
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> Ten years ago this Commission allowed 8 per cent upon a reasonable estimate of investment as a fair return in certain cases, and subsequent developments have confirmed the reasonableness of such a figure from the standpoint of both the utility and the consumers Since that time the business of generating and distributing electricity has vastly increased in extent and importance. Weaker companies have been eliminated by consolidation and destructive competition has almost disappeared. Conservative financing under public control and increased recognition of the importance of utility service to the community have increased the confidence of the investor All these things tend to make possible a reduction in the rate of return which must be allowed in order that electric utilities may secure the capital necessary to their growth. . . . . The particular utility now before us is not an unusually large company and serves no large cities. Its securities do not have the broad market and wide reputation of the larger companies. After a due consideration of all factors the Commission believes that in this instance a net return of 8 per cent after the payment of federal income tax is reasonable [13]

This quotation also serves to bring out the point already noted, namely, that the concept of a fair return has shown a tendency to become independent of the rate base and to be fixed by more or less rigid and absolute standards.

The price upheaval due to the world war affected the utilities and their consumers alike. The abnormal conditions of this period resulted in the Commission's modifying the policies of preceding years. Although public utility corporations are entitled to receive a fair return on a fair value, as a matter of fact they did not get this in

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[12] 24 C R. C. 69.

[13] *Ibid* 75. See also *Golden Gate Ferry Co.*, 26 C. R. C. 172, 179: "In only a few exceptional cases where hazards were extraordinary or where the invested capital was relatively small in proportion to the amount of operating revenues and expenses, has the Commission allowed a return in excess of approximately 8 per cent."

most cases during the war years. Of course, it always rests in the hands of the courts and the commissions to decide what constitutes a fair return on a fair value, and a rate set at one time may be considered too high or too low at another, because of a change of conditions. Even within the limits of this reservation, however, the authorities took the stand that utilities during this period could not expect to receive what was acknowledged, by precedent, to be a fair return. As we shall see in the following section, in California it was maintained that the consumers of public utility services should not be expected to bear the entire burden arising from abnormal costs due to war conditions. Consequently, although utility rates were raised to meet the new situation, the increases did not correspond to the price increases and the profits of the public service corporations suffered accordingly.[14] For example, in the application of the *Northern California Power Company Consolidated* for an increase of rates because of the increased cost of serving gas, the California Commission said:

> The commission, in considering this and other applications of this kind at the present time, recognizes the abnormal condition under which public utilities are laboring, and seeks to afford such relief as is fair and reasonable. However, utilities should certainly not expect the public to bear all of the burden of the prevailing abnormally high prices due to war conditions, nor ask that they be permitted to earn the same returns that might reasonably be expected under normal conditions.[15]

From the standpoint of the theory underlying the decisions, this attitude really represented no departure from the policy adopted before the war. Such unusual and unforeseen conditions cannot be said to modify the theory upon which a body acts, unless it can be shown that the fundamental premises have been changed in the light of experience.

In the period of depression following 1920, the public fought for lower rates on the ground that prices had fallen and it was unable to bear the charges being made for public utility services. As we shall see later, the authorities, in theory at least, maintained that the utilities had been asked to bear part of the burden during the abnormal price upheaval of the war and could not be expected to continue to do so when prices fell. Thus far were they consistent. But here their logic ceased, for they failed to take account of the deficiencies below a fair return suffered by the companies previously,

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[14] See 14 C. R. C. 460; see also discussion of this question in the following section.

[15] 15 C. R. C. 208, 211.

and considered the rates only as of the time of the inquiry.[16] Consequently the utilities failed to earn a fair return over a period of years, although the fundamental tenet of the whole regulatory scheme was to the effect that they should.

The Interstate Commerce Commission has maintained the same stand in this respect, as the California body, by asserting that rates cannot be regulated in order to relieve an industry in distress. Economic necessity should not, the federal authorities have contended, be used as a new standard whereby to require the reduction of rates lower than would be justified by other standards recognized. In *National Livestock Shippers' League vs. Atchison, Topeka and Santa Fe Railway Company*, organizations of stockmen asked that railroad rates be reduced because the livestock industry could not flourish under the existing structure.[17] Commissioner Hall in rendering his decision stated:

> Defendants have met the issue thus presented with evidence as to the reasonableness of the present rate structure as a whole, judged by the recognized transportation standards. It has been suggested that to these standards should be added another, that of economic necessity, that the carriers as public servants should bear part of the public burdens, and that we may find unjust and unreasonable a rate structure which is not relaxed to meet the needs of an industry. Put in another way, the proposition is advanced that we may find existing rates unjust and unreasonable and require that they be reduced below what would be justified by standards heretofore recognized, because an industry is not prospering. If that be true, then the converse must be true, that at times when the industry prospers we may find justified rates higher than those which under accepted standards would be just and reasonable. If true of this industry, it must be true of other industries that languish or flourish, now and hereafter; and if true of industries, why not true of localities and individuals? The answer is that the foundations of what is just and reasonable are not set on such shifting sands. Essentially the proposition is not new and has been dealt with and disposed of long ago.[18]

The conclusion to be drawn from this discussion is that rate-making bodies have in general gone on the *theory* that rates should be stable regardless of economic conditions. Once the rate base and the rate of return have been fixed, they have concluded, the only variation permissible is that which is necessary owing to changing costs, although even here the utilities have been expected to bear part of the increased burden due to rapidly rising prices.

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[16] See 19 C. R. C. 585, and *infra*. See also *Pac. Rice Growers Assoc. vs. A. T. & S. F. Ry.*, 20 C. R. C. 418, citing *Ponchatoula Farmers' Assoc. vs. Illinois Central R. Co.*, 19 I. C. C. 515; *Railroad Com. of Florida v. So. Express Co.*, 28 I. C. C. 635.

[17] 63 I. C. C. 107. [18] *Ibid.*: 115.

That this problem is far from being settled, but on the contrary presents a controversial field in which there is anything but unanimity of opinion is shown by the decisions rendered in the two cases concerning the *Application of the Southern California Edison Company* for authority to file and make effective new schedules providing for an emergency increase of electric rates[10] The Southern California Edison Company alleged that by reason of a shortage in the supply of hydro-electric power its operating expenses would be increased and its net revenue reduced by about $5,632,000 in the year 1924. The company maintained that the result of this reduction would be to make it impossible for bonds to be certified until late in 1925, and that, if construction work was to be continued and the demand of the public for an increased supply of power were to be met, rates had to be increased to a point that would permit the certification and sale of bonds in the spring of 1925.

The general prosperity of the territory in southern California served by the applicant had been more or less seriously affected by conditions of drought and this burden was further increased by a shortage of electric service on the applicant's system. The company did not contend that the rates were too low for average conditions, but that the burden of increase of operating expenses was too great to be borne by the company, especially in view of the rapid development of the territory. The Commission decided to grant an increase of revenue of $1,100,000 which would allow a total net return of about 6¾ per cent.

Commissioners Seavey and Shore registered a dissenting opinion in which they stated that they considered that the net return of an abnormal year should be taken into consideration only in its relation to the return over a period of years, on the theory that there are excess earnings in some years which should be used to offset the lean years. They contended that a rate of return should be set with reference to average conditions over a period of years. They also contended that if the Commission should add a surcharge of 10 per cent to existing rates to tide the company over, then they should also demand that rates should be proportionally reduced when the return was in excess of 7½ per cent on the rate base.

Another contention advanced in the dissenting opinion was that it was unjust to require consumers to share the so-called losses of the company at a time when the former were suffering similar and

[10] 25 C. R. C. 461, and 25 C. R. C. 475.

serious losses from the very same causes This argument should be compared to that advanced by the Commission during the period of rising prices. If companies are to be asked to share burdens under both conditions, when are they going to get a chance to make up for losses? Although regulating bodies have generally taken the stand that economic necessity should not be used as a separate standard in fixing rates yet this dissenting opinion, together with the general stand during the war, shows that rate-making bodies realize that such must be the case regardless of their insistence upon the investment theory.

Immediately after the decision just discussed was rendered, a rehearing was granted and the first verdict was reversed In this case the majority asserted that the circumstances were abnormal and temporary and that utilities should be expected to meet these without rate adjustments They stated that

> The present year presents unusual problems to applicant's consumers due to the general economic depression and the curtailed use of electric power made necessary by the drouth and the inability of the company to meet the demands made upon it The fixing of rates upon average rather than special conditions is highly desirable because it eliminates objectionable fluctuations in rates and distributes over several years the burden that would otherwise be concentrated in a single year.[20]

Commissioners Brundige and Martin dissented from the majority opinion on the rehearing and maintained the same position that they had held when the majority opinion was rendered in the original case.[21] They contended that their original stand was based on the theory that it would be fair to both the company and the ratepayers if each bore one-half of the burden caused by the excessive and unusual drought. They also insisted that the minority opinion in the original hearing had argued that the company should bear the entire burden, whereas in the majority opinion, the same individuals suggested that the expenses of the year 1924 be included in the average upon which rates should be based in the future. This meant that the lossess for that year should be absorbed over a period of years. Commissioners Brundige and Martin contended that this meant that the costs of 1924 would be spread over a long term of years and paid for by consumers who would receive little if any benefit at all from

[20] 25 C. R. C. 475, 478. See also *San Joaquin Light & Power Corp*, 17 C. R. C. 940, 954.

[21] Commissioner J. T. Whittlesley registered with the majority in the original case, and then registered with it again in the opinion on the rehearing which reversed the first decision.

such increased expenditures. The present Commission, they said, had no right to "leave in the hands of future Commissions the duty of reimbursing the company for necessary and admitted expenditures, to which reimbursement it is, in equity, entitled now."[22]

In conclusion they stated:

> Economic conditions and price levels change from time to time. Utility rates, *to be fair alike to consumers and the company must change also.* It is not possible that any Commission can fix rates so as to spread the losses of 1924 over a period of forty or even of twenty years. If this were possible, in our opinion, it would be undesirable. In effect the result can only be to deny the company any reimbursement for its extraordinary expenditures.[23]

The two opinions just discussed bring out forcefully the fundamental problems connected with the regulation of rates based on the investment theory. The difficulty arose in the application of the principles, subscribed to by the majority and the minority alike, that utilities are entitled to a fair return on a fair value under economic conditions varying widely from year to year. The minority in the second opinion emphasized what experience has shown to be the case, namely, that when losses have been incurred they cannot be amortized over future years.

The majority decision in the second instance certainly showed a logical consistency with the theory advanced during the war years, namely, that the utilities should be expected to bear part of the burden in abnormal times. They were just as certainly illogical in their attitude in that they were asking the companies to bear part of the burden both during rising as well as falling prices.

If utilities must absorb part of the burden during periods of rapidly rising prices and then cannot get enough to constitute a fair return during depression, let alone make up for previous losses, it would seem that they are being caught both ways. What constitutes *average conditions* under these circumstances? As long as we have changing economic conditions, with their resultant periods of rising and falling prices, prosperity and depression, rate-making bodies will be faced with problems similar in principle, if not so extreme.

The issues presented here must carry very great weight in the ultimate decision as to what constitutes a sound theory of rate-making. This final opinion of the California Commission, taken in conjunction with previous ones during the period of rising prices, shows a very inconsistent attitude on the part of the authorities, which, if followed

[22] 25 C. R. C. 475, 481.

[23] *Ibid.*:481–482. Italics mine.

regularly, would catch the utilities both ways. In time of rapidly rising prices the utilities are expected to forego part of their legal profits; in times of depression the same is required, while, in addition, the economic condition of the consumers reacts unfavorably to prevent a fair return.

On the other hand, if utility rates are to vary with economic conditions the theory of a fair return on reasonable investment has been definitely abandoned, and the prime gauge has become financial requirements tempered with ability to pay. So far no rate making body has escaped this dilemma. Incidentally, it may be remarked, the final decision in the Southern California Edison case, is, from this viewpoint, decidedly sound; the real criticism of it lies in the fact that it is out of line with the general policy and therefore is not logically consistent. Rate-making bodies at least must follow a definite line of approach, if that prove unsatisfactory then a new policy must be adopted but to wander from pillar to post is obviously impossible if regulation is to be successful.

Nor is the California Commission the only one that has divided on this issue. The dissenting opinion of Commissioner Campbell in the *National Livestock Shippers' League vs. Atchison, Topeka and Santa Fe Railway Company*, 63 I. C. C. 107, shows that the Interstate Commerce Commission has failed to reach a unanimity of opinion on the same question. The dissenting member maintained that the interstate Commerce Commission was obliged by section 1 of the act to prescribe rates which were no more than the reasonable value of the services received. He contended that the livestock rates in force were unduly burdensome because of the economic condition of the industry and that they, therefore, should have been lowered.

The theory of the commissions, then, in spite of a strong dissenting minority, is that the return to which utilities are entitled should remain constant despite fluctuating economic conditions. The policy is to stabilize earnings as much as possible. Thus, in times of prosperity when unregulated industry is experiencing rising profits, the rate of return to the utilities remains constant, and the same is true, theoretically at least, when the reverse takes place. Thus public service corporations are supposed to ride below the crest in good times and above the trough in bad.

The California authorities at first went farther than this, however, in their attempt at stabilization. They maintained that where a utility had been charging rates that yielded more than a fair return

on a reasonable value, and the excess had been re-invested by the owners, a return would not be allowed on such investment The theory underlying this was that the corporations were not legally entitled to these earnings.

One of the earliest decisions that the California Railroad Commission, as now constituted, rendered on this question was to the effect that no public utility operating within the state of California would be allowed to receive a return upon the property, the money for the acquisition of which had been supplied by the public in the form of excessive rates. While agreeing that utilities were entitled to a fair return, the authorities asserted that on the properties which had been constructed from money over and above a fair rate of return, that had been received from consumers, no return was to be allowed.

This principle was first laid down in the case of *Geo A. Legg vs. The Nevada County Narrow Gauge Railroad Company and the Southern Pacific Railroad Company.*[24] The complainant asked that the transfer charge of fifteen cents per ton assessed on joint traffic moving over the lines of the two carriers in question, be abolished and that an advance in rates be allowed to points on the Nevada County Narrow Gauge Railroad. After a consideration of the facts it was decided that the transfer charge should be abolished. Then came the problem of whether or not the companies needed an increased revenue to make up for this reduction. It was found that the bonded indebtedness of the Nevada County Railroad had been reduced by $61,000 from 1900 to 1910 from earnings of property; and during the same time $163,941.46 were invested in the property from earnings, in addition to an annual dividend of about 3¼ per cent The stand of the Commission in regard to the income in this case is best shown by a quotation from the decision:

> We do not believe, that the public should be called upon to pay excessive rates so that bond issues can be retired from earnings of a road. The stockholders are the beneficiaries as bonds are retired, and if bonds must be retired before the stockholders are prepared to do so, they, not the public, should pay for the mistake in financing.
>
> In addition, this company has paid from its earnings $163,941.46 in ten years for new construction, betterments, improvements, etc. How far can it be expected the public should go toward paying for such items? With the expenditure of each amount, the value of property increases, the assets of the stockholders and bondholders increase without further investment on their part.
>
> Railroads should make due allowance for depreciation and should be permitted to accumulate sufficient surplus to renew facilities worn out in service, but the

[24] 1 C. R. C. 11, *supra*. See also 3 C. R. C. 1212; 4 C. R. C. 570.

public should not be called upon to provide the money for new construction and permanent improvements.

If the stockholders wish to invest their money in new construction, and the like, the public might be reasonably asked to pay fair returns on the additional capital thus invested, but we believe it is absurd to ask the public to furnish both principal and interest, through the medium of excessive rates. Some of these improvements are designed to do service for all time, and the shippers and traveling public of today should not be burdened to provide facilities for future generations.[25]

The last statement was supported by a quotation from the decision of the Supreme Court in *Illinois Central Railroad vs. I. C. C.*, 206 U. S. 441, in which the court took exactly the same stand.

Mr. Eshleman, a short while afterwards, reaffirmed this decision. The *Nevada-California-Oregon Railway* had applied for permission to increase its passenger fares to 7 cents per mile.[26] The authorities at this early time did not have the necessary information by which they could gauge the rates on the valuation basis, but by an examination of the accounts of the company, the presiding commissioner found that the income of the company was yielding a return of 5 per cent on a valuation of $13,200 per mile of railroad. He also found that the maximum amount invested per mile was about $7,250. The latter figure was arrived at by assuming that the $505,291 charged to profit and loss from 1901 to 1911 had been re-invested. His conclusion was that the company was receiving ample return on its investment, without even considering the large amount charged to profit and loss. Then he added:

"The public cannot be expected to pay rates high enough to yield not only fair returns on the investment, but to create a fund for construction of extensions and later to be called upon to provide interest thereon."[27]

There have been no recent decisions to indicate whether or not the attitude of the authorities still remains the same on this question. But we have seen the dispute within the Commission itself concerning a stable rate of return regardless of economic conditions in re *Application of Southern California Edison Company* for an emergency increase in electric rates. The majority opinion in this case would seem to uphold the previous stand while the dissenting minority maintained that past earnings cannot be considered in deciding present rates.

The latter viewpoint is quite in accord with a recent opinion rendered by Mr. Justice Butler in re *Board of Public Utility Com-*

[25] *Ibid.*:19. [26] 1 C. R. C. 223. [27] *Ibid.*:226.

missioners et al. vs. New York Telephone Company, 271 U. S. 23. We quote at length from the decision:

> Past losses cannot be used to enhance the value of the property or to support a claim that rates for the future are confiscatory . . . .
>
> And the law does not require the company to give up for the benefit of future subscribers any part of its accumulations from past operations. Profits of the past cannot be used to sustain confiscatory rates for the future. . . .
>
> Customers pay for service, not for the property used to render it. Their payments are not contributions to depreciation or other operating expenses, or to capital of the company. By paying bills for service they do not acquire any interest, legal or equitable, in the property used for their convenience or in the funds of the company. Property paid for out of moneys received for service belongs to the company, just as does that purchased out of the proceeds of its bonds and stock.[28]

The position of utility earnings in the eyes of the law seems quite clear. They are to be considered as of the time of the inquiry and decision. Under conditions of prosperity the limiting rate is set by the authorities at a fair return on the rate base. In times of depression, while the legal maximum is still the same, economic necessity in the form of a diminished demand for service drives the earnings below this. It follows then that utilities under the present system of regulation *cannot* get an average fair return over a period of years.

As we have seen, the California authorities have held that a fair return varies from about 6.5 per cent to 8 per cent depending upon the nature of the business. In stable industries the tendency is toward the lower rate while in more uncertain ones it is toward the higher; in some cases of exceptional risk a return of somewhat more than 8 per cent has been allowed.

The Interstate Commerce Commission, on the other hand, is bound by law to 6 per cent as a maximum on the total value of railroad property, although, of course, any one railroad may earn more. The constitutionality of the recapture clause was upheld by former Chief Justice Taft in *Dayton-Goose Creek Ry. vs. United States*, 263 U. S. 456, but the question of when a rate becomes confiscatory was not dealt with. Nor was any light thrown on the problem in *St. Louis & O'Fallon Ry. Co. et al., vs. United States*, 279 U. S. 461. Apparently, ten years was too short a time to deal with such a question.

On the other hand in *McCardle et al. vs. Indianapolis Water Company*, 272 U. S. 400, Mr. Justice Butler held that a reasonable rate of return was not less than 7 per cent, and this on what amounted to a cost of reproduction rate base. Finally in *United Railways and*

[28] 271 U. S. 23, pp. 31–32.

Electric Company of Baltimore vs. Harold E. West, et al, 280 U. S. 234, the majority of the court implied that 8 per cent is necessary for a fair return.[29] It is quite evident that a "fair return" still constitutes an unsolved mystery.

Although it is legally the duty of regulatory bodies to see that corporations under their control receive a fair return whenever possible, nevertheless the various laws governing regulation do not *guarantee* any earnings at all. The investor must still take this risk.

The California Commission has made it clear that it will endeavor to see that the utilities receive a fair return on money wisely and sanely expended in serving the public. But at the same time it has been made just as plain to investors that *no guarantee is given* as to the financial success of any enterprise, and those who purchase utility securities of any kind in California must make an independent investigation. To quote the Commission's own words.

> It should be clearly understood in all cases of issuance of certificates of public convenience and necessity and approval of franchise rights, secured or to be secured and of issues of stocks, bonds, or other securities, that the Commission does not and cannot guarantee the financial success of the enterprise. People who finance public utilities in this state must continue to take the risk of success of the venture just as they have always done in the past. The Public Utilities Act is no magic talisman insuring public utilities against failure in case good judgment is not exercised in the financing and construction thereof. Under the Public Utilities Act, the projectors of public service enterprises may rest assured that in so far as the Commission has jurisdiction, the utility will be permitted to collect rates sufficient to yield a fair return on the money wisely and sanely expended in serving the public, but more than this they have no right to expect.[30]

Exactly the same remarks apply to the Interstate Commerce Commission. This body is bound by law to prescribe rates that will yield a fair return on the aggregate value of railroad property in the United States, but no guaranty is given to any particular transportation company that it will receive this amount nor can any one carrier claim that the rates are confiscatory because it does not do so. The charge of confiscation must rest on other grounds than this.

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[29] The California Commission has not yet been challenged in the courts as to its basic principles of what constitutes a fair return and a fair value. This seems to be due to the fact that the Commission has been liberal in its attitude, and also because both the utilities and the Commission have endeavored to cooperate in the solution of problems. See Brief of *Southern California Edison Co.* in 19 C. R. C. 595.

[30] 1 C. R. C. 135, Application of *Central California Gas Company* re—certificate of convenience and purchase of property, p. 141; cf. Interstate Commerce Act.

War Prices and the Rate of Return

The problem of the rate of return during the unusual price conditions of the war has been deferred until this time because it did not alter the theory of regulation, although it was a very important incident in the application of the theory. The rapid rise in prices caused by the upheaval in Europe precipitated a general demand on the part of utility corporations for an advance in rates which would enable the companies to meet increased costs and at the same time keep their earnings sufficiently high to secure the capital necessary for the continuation of their business. This, however, did not mean a change in the rate base for, as we have already seen, the Commission adhered to the investment basis of determining fair value for rate-making. Consequently the alterations in rates needed only to be sufficient to cover the increasing expenses of production, and the increasing inducement for investment necessitated by the rising price of money. The result was that rates did not change to the same extent as did many other prices. According to the estimate of the California Commission itself, the average advance in utility rates did not exceed 40 per cent, whereas the general price level rose from 72 per cent to 300 per cent over the pre-war level.[31] These statistics prove nothing of course as to the restriction of rates to that extent; nor as to the soundness of the investment theory as a basis for gauging the reasonableness of rates. Neither do they prove that some other theory of rate regulation might not have been used equally as well and with better results. They merely illustrate what the authorities claimed to be the facts of the case without any conclusion or inferences drawn therefrom.

Since the general methods by which the authorities determined a fair return have already been discussed, it is necessary to present here only a few illustrations to show how increasing costs due to rising prices were handled, and how the application of the theory of a fair return was thereby affected.

An example of a case in which rate increases were granted because of increased costs concerned the application of the *Citrus Belt Gas Company* for an increase in gas rates.[32] The applicant contended that in the past it had not earned a fair return on its investment and it did not propose to ask for such now; but owing to the increased cost of oil which it used in manufacturing its artificial gas an increase of

[31] *Annual Report* of the California Railroad Commission 1920–1921:31.
[32] 14 C. R. C. 141.

rates was necessary in order to enable it to continue to earn at least the net return enjoyed in 1916 In other words, the increase requested was merely to offset the increased cost of oil although the costs of labor and materials had gone up also. The Commission's experts examined the increase of operating expenses due to the rise in the price of oil estimated what the extra cost would be, and recommended economies in the use of oil. The Commission emphasized the necessity of keeping rates down because of the effect on the sales of the utility. It was evident that the people were paying pretty nearly all that they were willing to pay With these considerations in mind Mr Devlin granted the relief requested In doing so he remarked:

Careful consideration must be given the public in increasing rates during this national crisis when the prices of all commodities have materially increased, in many cases far out of proportion to the increase in the public's earning power. A corporation must expect to not only economize in so far as possible but in many instances may have to forego a considerable part of its profits during this period. I believe, however, in this instance, considering the previous low return earned, that applicant is entitled to an increase in rates which will, as near as possible, offset the increased price of oil. Increased rates to cover advanced cost of oil will not, in my opinion, make it possible for applicant to net even its former return owing to probable reduction in sales and increase of other costs. However, I do not believe it advisable at this time to increase the rates further than herein set forth.[33]

The opinion expressed in this decision that utilities might be expected to forego a considerable part of their profits during a period of national crisis was re-asserted by Mr Devlin in *re City of Pacific Grove vs Coast Valley Gas and Electric Company*[34] The complainant in this case alleged that the gas rates in Pacific Grove were exorbitant and unreasonable The Commission made a very extensive investigation into the rate base, operating expenses, cost of money, rate of return, and the problem of rising prices, and concluded that an advance in charges was necessary. But although a revision of rates was ordered because of increased costs the commissioner did not consider that the utility was entitled to shift the entire burden arising from the abnormal situation on to the shoulders of the consumers. He stated that he realized the necessity of a revision of rates to take care of abnormal operating expenses brought about by the existing national crisis, but he did not consider it logical, equitable, or necessary that all of the burden so created should be shifted to the consumers, but that a fair portion of such burden should be shared by the utilities[35]

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[33] *Ibid.*:144. [34] 14 C. R. C. 460. [35] *Ibid*:483.

This stand was consistently maintained at a later date when prices had fallen considerably, as was shown in re *Application of the Pacific Gas and Electric Company* for an order of the Railroad Commission fixing fair and reasonable rates for gas supplied to its consumers.[36] The company asked for an increase in rates on the ground that the cost of the oil it used in manufacturing gas had increased by $282,532 over the cost estimated when the existing rates were fixed by the Commission. The protesting cities argued that with falling prices the public would be faced with reduced profits and that the gas company should be expected to bear its part of the burden by accepting a lower return. Mr Devlin quite justly rejoined:

> In this connection it must be borne in mind that the same point was argued at the early part of the war when increase of gas and electric rates throughout the state was considered—that the utilities should bear part of the war burden resulting from the tendency toward increases in the price of all commodities and the cost of living, and it is to be further borne in mind that at the time the rates were increased in 1918 consideration was given to this fact and the company was not allowed to increase its rate of profit during the war period but was only allowed sufficient return to approximately maintain its former earnings and continue to render adequate service. The records show that applicant's net profits from its gas business have not increased during the period of high prices, when it is conceded that extra profits were made by industries in general The utility being restricted to but a fair and reasonable return during such a period must when a change in such conditions occurs reducing the profits in other lines of endeavor be maintained upon a reasonable basis, as otherwise proper and adequate service cannot be rendered.[37]

Accordingly the company was granted an increase in rates. But it should be noted that the company during 1920 had failed to earn a reasonable return by $600,000; yet Mr. Devlin did not prescribe a rate which would enable it to wipe out this deficit. Instead he fixed one which he estimated would give a reasonable return during the ensuing year.

The sudden rise in the price of oil following the autumn of 1916 confronted many of the utility companies with a financial emergency. It became necessary for the Commission to fix rates so as to cope with the situation. This was done in a case concerning the *Pacific Gas and Electric Company* which case became a precedent for many other similar ones.[38] The authorities decided that it was quite impossible for the gas companies to absorb the extra cost and remain sound institutions financially. To meet this situation normal rates were established, and superimposed upon them was a distinct and separate

[36] 19 C. R. C. 585. [37] *Ibid.*:585. [38] 15 C. R. C. 759.

surcharge The surcharge represented as nearly as possible the abnormally increased costs of operation This method of rate-making was used at this time so as to give a flexible scheme for promptly meeting changing conditions of cost without the necessity of constantly revising all of the base rates Thus an increase in costs would be reflected by an increase in the surcharge, and a decrease in costs by a decrease in the surcharge. The rate schedule divided the charge paid by the consumer into two parts, (1) the base, (2) the surcharge. The base rate represented the normal reasonable rate under the conditions existing when the first rate was prescribed. The surcharge represented the addition necessary to meet emergency conditions which had arisen subsequent to that date. Further variations in cost instead of requiring a new and careful examination of the whole rate schedule could be dealt with by altering the surcharge [39]

The discussion in this chapter has served to show that the general theory of the California Railroad Commission is that the earnings of a utility should be stable, limited at all times by a fair return on the rate base established at the time of the inquiry, and that in times of stress the companies should forego part of their earnings The authorities have not been logically consistent, however, since they have not allowed utilities to make up for losses incurred in times of stress by amortizing such amounts in prosperous periods. Perhaps they would maintain that this has been taken care of in the allowance of a liberal return when the consumers have been able to pay it. This is hardly a legitimate defense, however, for we have seen that utilities have on occasion been refused a return on properties acquired by moneys received from consumers in excess of a reasonable return. Moreover, the only losses corporations have been allowed to include in a rate base have been those termed developmental costs. Still further, it is apparent that the rate of return is fixed as of the time of the decision and indeed this must be so according to the opinion rendered by Mr. Justice Butler in re *Board of Public Utility Commissioners et al. vs. New York Telephone Company*, 271 U. S. 23.

Although the Interstate Commerce Commission has not dealt with such a situation as this, since only since 1920 has it been called upon to face the problem of a fair rate of return, yet the actual conditions in the transportation industry have led to exactly the same results. From 1888 to 1922 the highest ratio of dividends declared to all

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[39] See: 15 C. R. C. 773; 15 C. R. C. 778; 15 C. R C. 782; 15 C. R. C. 788; 15 C. R. C. 868; for additional and similar examples

the stocks of the railroad companies was 5.42 per cent in 1911.[40] In the ten years previous to 1915 the railroads were not able to earn a net income sufficient to maintain credit and attract capital, and in the latter year receiverships reached their peak with a total of 42,000 miles in the hands of the courts.[41] Consequently the transportation industry broke down as a result of the strain imposed by the war. When it emerged from federal control it was in anything but a satisfactory condition. By this time, however, the mandate had been given the Interstate Commerce Commission to see that the railroads received 5½ per cent on their total valuation In spite of this legal requirement the companies voluntarily had to accord a reduction of 10 per cent on practically all rates on agricultural produce, in 1922, because of economic conditions Later in the year the Commission made a horizontal reduction of 10 per cent on practically all commodities.[42] In fact the legal return of 5¾ per cent has not yet been acquired by the railroads as a whole even on the tentative valuation. It is quite apparent that they will never receive an average of this amount over a period of years if past losses are considered at all. If 5¾ per cent is theoretically the return necessary to support the transportation industry and this is all the carriers are allowed to earn in good times, where is the reserve against hard times? Evidently the authorities have entirely failed to profit by the experience of the preceding fifteen years.[43]

The analysis in this chapter of the problems confronting the authorities and the decisions they have rendered, brings out the fundamental differences between the theory upon which they have been working and the actual applications of that theory. In principle the public service corporations have been supposed to secure what has been designated as a "fair return on a fair value" In practice there have been many deviations from that principle and

[40] Miller, S. L., *Railway Transportation*, 520. The Hoch-Smith Resolution, 1925, required the I. C. C. to give due weight to the effect of rate readjustments upon commercial conditions This was contrary to the announced policy of the Commission, 63 I. C. C 107. It also introduced a conflict with the "rule of rate-making" of the Act of 1920. It should be noted, however, that this Resolution cannot compel the I. C. C. to prescribe confiscatory rates. See Locklin, D. P., *Railroad Regulation Since 1920;* Pegrum, D. F., *Legal v. Economic Principles in Valuation, op. cit.*

[41] Cunningham, W. J., *American Railroads*, chap. 2.

[42] Jones, Eliot, *op. cit.*:578–579. At the present moment (Aug 1930) President Hoover is asking the railroads voluntarily to reduce rates in order to relieve the agricultural regions suffering from the drought.

[43] See Bureau of Railway Economics, *A Review of Railway Operations in 1926*:38.

consequently the average return on investment over a period of years has been lower than what is admitted to be fair

Wherefore this discrepancy? The answer seems to be twofold: first, in the inconsistency in the application of the theory, second, in the practical difficulties in the way of applying a rigid standard to widely varying economic conditions accompanied by the view that, regardless of present conditions, no thought must be taken of the future A far-sighted policy is advisable, it is necessary, therefore, to realize that a fair return in times of prosperity may be an entirely different thing from a fair return in times of depression This holds true from the standpoint of the consumer as well as of the producer Consequently, it would be better to build up reserves in good times, with the specific provision that these were to be used to assist in paying dividends when business was slack, than to endeavor to keep up earnings in depression due to a lack of excess income during prosperity Nor is stability endangered thereby: on the contrary it is strengthened by the more equitable apportionment of the burden on the shoulders of the consumer Surely the street railway industry offers adequate demonstration of the futility of a rigid rate structure.

Moreover, unless returns vary sufficiently to attract capital from other fields of industry, investment in public service corporations is bound to fall short of the needs, with the inevitable result that the public will suffer because of inadequate facilities. Witness the condition of the railroads as a result of such a policy down to 1918 [44]

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[44] "The war worked havoc with many utilities. Commissions did not see fit to make rate increases at the time of application in the hope that improvement in economic conditions would make them unnecessary. Often, when increases were granted, they proved insufficient to meet the increased costs of labor and capital." *Outlines of Public Utility Economics*, Glaeser, M. G., New York 1927, p. 738 See also Lagerquist, W. E., *Investment Analysis*, chap. XIX.

CHAPTER IV

COST OF SERVICE AND PARTICULAR RATES

Introduction

The investment theory of rate-making obviously is concerned only with the rate level as a whole. Since all utilities either perform a variety of services or serve a variety of customers, it becomes necessary to determine individual rates as well as the general level A gauge must therefore be secured for each of these, and one of the standards used is the cost of the particular service performed. This standard has been applied by the Commission in California in various ways.

Analysis of the application of cost of service to fixation of particular rates discloses the fact that four main factors have furnished the guide: metered service, the distance principle, joint rates, and additional cost. Metered service has been used in the regulation of particular rates of utilities, other than transportation; the distance principle and joint rates have been utilized primarily in connection with the determination of particular transportation charges, while the factor of additional cost has been applied to all utilities The theoretical basis underlying each of these devices, however, has been the same, namely, the cost of the service rendered, the word cost being interpreted according to circumstances. It should be understood, of course, that the foregoing principles are not mutually exclusive. Moreover, other rate-making factors, discussed elsewhere, are, more often than not, used at the same time.

Metered Service

Early in its history the California Railroad Commission expressed the opinion that charges on the basis of a metered service were much to be preferred, and it has been the policy to encourage the use of meters wherever possible. The theory underlying this attitude is of a twofold nature: (1) a flat rate tends toward waste: one based upon amount consumed, checks waste; (2) charges on the meter basis distribute the burden of costs more equitably.

Furthermore, the flat rate offers no opportunity to distribute the burden of cost upon a fair basis of quantity of service furnished the consumer, because within the limit of the flat rate the smallest consumer pays as much as the largest. This principle must not be carried to the extent of preventing the establishment of a fair minimum charge, for this latter is based on the necessity of compelling each consumer to bear some part of the burden of furnishing the utility.[1]

The only important utility service in California, except street railroads, whose rates are primarily on a "flat" basis is telephone service Within a given exchange area the charges are on a flat-rate basis. Outside the given exchange area, however, rates rest strictly on a mileage basis, being graded similarly to railroad rates, and also being graded as to time.

The flat rates within a given exchange area are themselves in accordance, as much as possible, with cost and quality of service, but within the limits of these flat rates there is absolutely no variation of charge corresponding to the amount of use of the service[2]

The California Commission has taken steps, however, toward establishing telephone service on a metered basis The outstanding decision in this connection was that concerning the rates of the *Southern California Telephone Company*[3] In its application to the Commission the company, among other things, asked permission to introduce measured rates for business service Both the Commission and its engineers agreed that this should be done in order to distribute the charges more equitably among the subscribers It was stated that practically all the cities in the United States comparable in size to Los Angeles had measured telephone rates for business service. The number of telephones in Los Angeles was increasing rapidly, and the variation in use of the telephone service by business subscribers was becoming greater. At that time the use of an individual business line service varied from a few calls to as high as 1,500 calls per month.[4] Consequently, on the flat-rate basis the subscriber whose requirements were limited to a few calls per month found his rates quite out of

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[1] *Hawthorne Electric and Water Company*, 1 C. R. C. 972, 974.

[2] The following example is an illustration of this:

Rates of Corona Home Telegraph and Telephone Company

	Business Service		Residence Service	
	Wall Set	Desk Set	Wall Set	Desk Set
One-party per month	\$2.50	\$2.75	\$2.00	\$2 25
Two-party per month.	2.25	2.50	1 75	2.00
Four-party per month	2.00	2.25	1.50	1.75
Eight-party per month.	1.75	2 00	1.25	1.50

8 C. R. C. 175, 189.

[3] 25 C. R. C. 721. [4] *Ibid.*:759.

line with the service required or received. Under such conditions it was quite impossible to apportion the charges or the costs equitably as between the small user and the large user. In fixing the rates for the company the Commission said:

As heretofore stated, we believe that flat rate service for individual business line and commercial private branch exchange service should be continued only until measured service can be established and the subscriber be given ample opportunity to become familiar with the new rates and their application. The rates herein fixed contemplate that on and after January 1, 1926, individual business line service and all private branch exchange service in the Los Angeles exchange area shall be furnished only under measured rates. The measured rates herein fixed for business service will result in a reduction in charges compared with the present flat rates to a considerable number of users and to those business subscribers having a relatively small demand for service. Those subscribers having a large demand for service will have their rates increased and under the measured rates the increase will be nearly in proportion to the number of telephone calls made.[5]

In virtually every instance where the problem of fixing a rate schedule for electricity, gas, or water service has come before the California Commission and the utility has been employing a flat rate the authorities have recommended the installation of meters, if it was at all feasible. This has been done on the theory that:

. . . . . it is impossible to establish a schedule of unmeasured rates whereby the charges will be equitably distributed among the various consumers in proportion to their use of water. A flat rate tends to an excessive and extravagant use of water [and any other utility service]. The benefits to be derived from a metered system are well established. They result in a conservation of the supply, an equitable distribution of the charges, and a reduction in operation expenses . . . .[6]

The actual rate schedules in force in California are the result of the combined efforts of the experts of the Commission and the utilities. The discretion of these experts, however, is circumscribed by certain general principles which the authorities have announced from time to time. It should be noted in passing that, while cost of

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[5] *Ibid.*:769.

The following selection from the rate schedule prescribed by the Commission shows the charges for business measured service:

Business Measured Service: *Each individual line station:*	RATE WALL SET	RATE DESK SET
First 75 messages or less per month....	$5.50	$5.75
Next 100 messages per month, per message	.05	.05
All over 175 messages, per month, per message	.04	.04
Each Extension Station, per month	1.00	1.25

Ibid.:774. See Holmes, F. L., *op. cit.*, for illustrations of similar schedules in use in Wisconsin.

[6] *Chico Water Supply Co.*, 19 C. R. C. 653, 655.

service only is being discussed in this chapter, the numerous other factors mentioned are elsewhere given due consideration.[7]

In the construction of a rate schedule, the amount of revenue to be obtained from a given class of consumers has first to be determined. The rate schedule is then devised in a way designed, first, to produce this revenue, and second, to apportion the burden equitably among the consumers. The supplying of utility service embodies two distinct factors, (1) the demand for service, and (2) the amount of service required. The California authorities have recognized the presence of these two factors[8] and have given effect to them in setting up rate schedules, but the application of these principles has taken different forms. The meter-rate schedules for power, commercial, and public lighting generally separate demand and energy charges.

The demand charge has been determined in a number of ways, depending on the circumstances of the case under discussion. The theory behind the demand charge is that "readiness-to-serve" entails an expense regardless of the amount of energy used and each consumer is expected to bear his share of that expense. An excellent illustration of the application of that principle is given in *Town of Antioch vs. Pacific Gas and Electric Company*.[9]

This case involved a complaint that the rates charged to consumers in the town of Antioch were unjust and exorbitant. The general level of rates was established on the basis of a fair return on the fair value of the property. A careful analysis was then made of the cost of production and transmission of energy, to the Pacific Gas and Electric Company. The total demand cost was arrived at by allowing interest on capital at 8 per cent (fair return on fair value), depreciation, and maintenance. This gave a demand cost of $2,408,377.66. The total energy cost was determined by adding together operating expenses, general expenses, taxes, and cost of energy purchased. This gave a total of $1,996,178.90. The total energy deliverable to substations, estimated for 1914, was 602,360,837 kilowatt hours. The maximum simultaneous demand of substations, estimated for 1914, was 119,630 kilowatts. These estimates gave a demand cost, based on the maximum simultaneous demand of all substations, of $20.13 per

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7 For a detailed scientific analysis of the relations between different rates granted by a company to different classes of consumers, see Watkins, G. P., *Electrical Rates* (Van Nostrand, New York, 1921).

8 "A logical basis for power rates must take into account the demand factor as well as the amount of energy supplied." *Visalia Elec. Ry. Co. vs. Mt. Whitney P. & E. Co.*, 14 C. R. C. 147, 151.

9 5 C. R. C. 19.

kilowatt. The energy cost was \$.003314 per kilowatt hour. Expressed as a "two part rate," the cost of energy deliverable at substations was thus found to be. demand cost \$20.13 per kilowatt; energy cost \$.003314 per kilowatt hour.[10] The cost of distribution was then determined for the town of Antioch and this added to the cost of energy delivered to the substation gave the total cost of service. Rate schedules, designed to meet this cost were then prescribed. The Commission did not discuss the way in which it apportioned the cost among the various classes of consumers.[11]

In the case just discussed the Commission used the "demand plus energy" principle to apportion the charges of a utility on a territorial basis. The same theory also has been used to fix the charges for individual consumers. In *Cole vs. South Feather Land and Water Company*,[12] rates were fixed at \$15.00 per miner's inch per annum, for all water applied for, whether the water was used or not, and 10 cents per miner's inch per 24 hours for water actually delivered. The standby charge was based on the theory that where a company agreed to be ready to serve, those with whom the agreement was made should pay a fair proportion of depreciation and return on investment or lose their preferential rights.

> In establishing the rate, I believe it just and reasonable to establish a two-part rate—one part representing a return on the investment and an allowance for depreciation, to be paid by all lands receiving water or claiming water under contract, and the other part to be paid for the amount actually used under the right established by the first part.[13]

Generally speaking, the California authorities have favored some form of measured power demand rather than connected load as the basis for determining the demand charge. However, both these factors have been recognized in making schedules. In the case of *East Bakersfield Improvement Association vs. San Joaquin Light and Power Corporation*,[14] one of the bases of complaint was that, with a few exceptions, the rates charged by the San Joaquin corporation for metered lighting service and for both metered and flat-rate power

10 *Ibid.*:58 f.

11 "As the cost of service is thus determined in the form of a demand and energy cost, the various load factors of the different towns served by defendant will be automatically taken care of . . . . ."—*Ibid*:62. See also *Thomas Monohan vs. Pacific Gas and Electric Co.*, 8 C. R. C. 566. In this case the ability of the various classes of consumers to pay had to be taken into consideration, and hence the total burden was not apportioned on the basis of cost. See *infra* chap. 5.

12 4 C. R. C. 1392.

13 *Ibid.*:1399. See also *Redding vs. Northern California Power Co.*, 11 C. R. C. 37, 66.

14 9 C. R. C. 542. See *Melcher v. Mt. Whitney P. & E. Co.* 9 C. R. C. 628.

service were all based, both as to the unit price at which the energy or service was supplied and as to the minimum charge, on the measured annual maximum demand The first measured maximum demand in any year was used as the basis for all subsequent charges unless a *higher* demand was later ascertained The demand was measured at *intervals convenient to the corporation* and the period for which the demand was taken was five minutes[15] The Commission objected to this system of making rates and laid down the general principles to be followed in this instance in the following terms:

> The operating characteristics of ordinary agricultural and other power installations are well known and can be provided for, readily and equitably, by rates based on the connected load . .
>
> Residence and other small lighting installations can be made to yield the proper amount of revenue through the establishment of simple block schedules as herein provided.
>
> Large power and lighting consumers, whose operating conditions are or may be subject to greater variation, both as to maximum demand and the amount of energy consumed, will yield sufficient revenue to justify the installation of one of several types of demand indicating and integrating watt hour meters which are now on the market[16]

The Commission also stated that maximum demand should be measured regularly over a period of not less than fifteen minutes, and that a single maximum demand reading should not govern an entire year's bill.

Rate schedules were then drawn up embodying these principles. Agricultural rates were made up of a demand charge of so much per horsepower plus an energy charge of \$.005 per kilowatt hour. The demand charge for both contract and non-contract rates was \$4.50 per horsepower for the first month. The rates per horsepower decreased for subsequent months but at a rate which gave an advantage to those receiving service on the contract basis.[17]

The non-contract agricultural power users were allowed to change to the basis of 94 per cent of the measured monthly maximum demand, by payment of a service charge for cost of measuring the demand.

Rates for industrial power installations of less than 20 horsepower were fixed on the basis of a minimum charge per horsepower, a

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[15] *Ibid.*:565, 566.

[16] *Ibid.*:567. Flat rates based on connected load were also established for agricultural power in this case, but the consumer was given the option to change to a meter basis.

[17] The Commission has recognized in its schedules the principle of quantity discounts, but the writer has not run across any opinion where a discussion of the basis of differentiation between ''wholesale'' and ''retail'' rates has been given. For an analysis of this problem see Watkins, G. P., *op. cit.*, chap. 6.

minimum monthly bill, and an energy charge per kilowatt hour on the "block" basis. The rates for larger power users were made up of a charge per kilowatt per month of measured maximum demand plus an energy charge and a minimum monthly bill. The general commercial lighting rate was made up in a similar way. The rate for public outdoor lighting service consisted of a base rate per lamp per year plus a charge per 100 lamp hours, the rates varying with the type of lamp used.[18]

Generally speaking, as previously stated, the Commission has not favored a demand charge based on the connected load. The attitude on this point was stated emphatically in the *re-Rates of the Northern California Power Company*.

> Any demand charge except for very small installation, based on a rated output of consumer's motor installation is clearly unjust, because there is no relation between the rating of a motor and its possible or probable demand on the utility's installed capacity. Hence it is deemed proper that a utility shall, upon request of consumer, ascertain by test the actual demand in each case and make the charge accordingly.[19]

Nevertheless, where the demand charged based on connected load is in use and seems to be equitable, no objection is made to retaining such a method of determining demand unless the consumer requests a change.

One final point in connection with wholesale rates deserves attention. The Commission has, on a number of occasions, dealt with the question of rates to be charged municipalities for fire protection. The method used by the Wisconsin Railroad Commission has been adopted in this State.

> The excess capacity of the water system that may be deemed justified by the necessity of providing for emergency demands such as that in fighting fire cannot fairly be charged against regular customers and paid under cover of a unit rate for water. . . . .
>
> The Wisconsin Railroad Commission has made a prolonged study of the proportion of cost properly chargeable to the general public which it calls the fire service charge and in several typical cases reports it to be between 25 per cent and 75 per cent of the total charges. In systems of the magnitude of the East Bay Water Company it is found to be between 25 per cent and 50 per cent.[20]

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[18] A detailed discussion of the San Joaquin case has been given because it illustrates the various principles that the Commission has used in fixing wholesale rates. See also *Madera Canal and Irrigation Company*, 13 C. R. C. 528.

[19] 1 C. R. C. 315, 326. See also *Engels Copper Mining Company vs. Great Western Power Company*, 17 C. R. C. 191, 195.

[20] *Glenview Improvement Club vs. People's Water Company*, 15 C. R. C. 910, 919. See also *re-Rates Van Nuys Water System*, 16 C. R. C. 125; *Oakland vs. East Bay Water Company*, 21 C. R. C. 536; *South San Francisco Water Co.*, 27 C. R. C. 98.

The basic annual charge is computed by charging so much per hydrant, depending upon the size, and so much per 1,000 feet of street pipe, depending on the size of the pipes. No charge is made for water used in fire fighting. For other public uses an additional charge is made for water consumed, the rate being either a flat rate per 100 cubic feet, or the regular meter rate if meters are permanently installed [21]

Retail meter rate schedules, generally speaking, consist of a minimum charge which entitles the consumer to a certain amount of service plus charges for additional service on a "block" basis. Where special conditions obtain, such as seasonal demands at resorts, the consumers are divided into two groups, and those responsible for the seasonal concentration are required to pay a higher rate [22] The two-part rate, consisting of a service charge plus an energy charge as distinguished from the ordinary minimum rate, is not common in California. The Commission has recognized the logic and equity of the two-part rate, but difficulties have been encountered in educating the public to this type of rate structure. In the course of time, however, these difficulties will probably be overcome [23]

Perhaps it should be noted in passing, that the distinction between "wholesale" and "retail" rates has, from the beginning, been recognized by regulatory bodies. Differences in rates between these two classes of service due to differences in the cost of rendering the services have consistently received approval

The Interstate Commerce Commission has acknowledged the validity of lower rates on carload than on less-than-carload shipments because of the fact that cost of service is less on the former than on the latter, and has agreed that if an article moves in sufficient volume it is reasonable to give it a carload classification because of the difference in cost of service.[24]

The economic justice of allowing a carload shipper lower rates than one who ships in small lots is apparent, on account of the difference in cost of such service

[21] Essentially the same principle is employed in fixing the charge for emergency consumers. "A public utility is not obligated to maintain expensive service installations solely as a standby to serve one large consumer in emergency cases unless such consumer is willing to pay a reasonable return on the cost of such service in addition to the regular rates for whatever amounts of water may be used." *East Bay Water Company*, 17 C. R. C. 502.

[22] See *El Dorado Water Co.*, 21 C. R. C. 321 *West Coast Gas Co.*, 5 C. R. C. 385.

[23] *Willits Water and Power Co.*, 21 C. R. C. 780. *Blethan vs. Sherman Water Co.*, 28 C. R. C. 54. *Santa Barbara vs. Southern Counties Gas Co*, 32 C. R. C. 35. *County of Ventura vs. Southern Counties Gas Co.*, 32 C. R. C. 477.

[24] Hammond, M. B, *Railway Rate Theories of the Interstate Commerce Commission*: 61–63.

to the railways. This has been recognized by the Interstate Commerce Commission and the courts as beyond question. Not only the amount of paying freight in relation to dead weight, but the cost of loading and unloading, of billing or collection and of adjusting damages—all of these elements of costs are noticeably less in the case of a full carload.[25]

The Distance Principle

The influence of distance on transportation rates has been recognized from the very start in legislation pertaining to transportation charges. This has usually taken the form of prohibiting the violation of the long-and-short haul rule But distance itself, apart from the long-and-short haul principle, has an important influence on rates, and ordinarily charges increase with increasing distance. Normally the tariffs of railroads are graded according to distance and it is only the exceptions that are brought before the commissions.

According to the law, the distance (or long-and-short haul) principle simply means that no greater compensation may be charged for the transportation of passengers or of the like kind of property for a shorter than for a longer distance over the same line or route in the same direction, the shorter being included within the longer distance, or any greater compensation as a through rate than the aggregate of the intermediate rates. The underlying theory is that the charge for a particular kind of service is to vary with the cost of rendering it, no more, no less. Thus, it will at once be seen that it is just another phase of the metered service idea and involves the determination of charges in accordance with the amount of service rendered.

A brief résumé of the history of the long-and-short haul clause legislation in California will not be amiss at this moment Section 21 of Article XII of the Constitution of 1879 forbade discrimination in transportation charges and also said:

> Persons and property transported over any railroad, or by any other transportation company or individual, shall be delivered at any station, landing or port, at charges not exceeding the charges for transportation of persons and property of the same class, in the same direction, to any more distant station, port or landing.

According to this rule the destination was the point of interest. For example, a greater charge might be made from B to C than from A to C provided charges to any more distant point beyond C were no

[25] Ripley, W. Z., *Railroads: Rates and Regulation*: 326-327.

less.[26] The Wright Act of 1909 contained a long-and-short haul provision differing considerably from that in the constitution. It reads as follows.

> No common carrier subject to the provisions of this Act shall charge or receive any greater compensation in the aggregate for the transportation of passengers or of a like kind of property, under substantially similar circumstances and conditions, for a shorter than for a longer distance over the same line in the same direction, the shorter being within the longer distance; but this shall not be construed as authorizing any such common carrier to charge and receive as great a compensation for a shorter as for a longer distance haul.

Hence according to this clause a carrier violated the law if it made the longer haul *from* as well as *to* a more distant station

The Wright Act was superseded by the Stetson–Eshleman Act of February 10, 1911, which contained no long-and-short haul clause. While this act was in force the constitution was the only regulator Then on October 10, 1911, by amendment of Section 21, of Article XII, the long-and-short haul clause was rigidly embodied in the constitution and permission had to be secured from the Commission before any exceptions whatsoever were allowed Similar provisions were embodied in the Public Utilities Act under which the Commission now operates, and which superseded the Stetson-Eshleman Act on March 23, 1912.[27]

It will be seen from this that the legislative history of the long-and-short haul provision in California parallels its federal legislative history. Both federal and state laws have dropped the phrase "under substantially similar circumstances and conditions," because of the obvious difficulties to which it gave rise, both contain rigid provisions in regard to long-and-short haul practices, both forbid the compensation for the through rate being greater than the aggregate of the intermediate rates over the same line or route [28]

Since the violation of the long-and-short haul principle is prohibited by the constitution of California and since exceptions to it can be made only by permission of the Railroad Commission, the rule is that the charges for common carriers must increase with the distance although they are not proportional to it. Consequently the Commission has enforced the rule whenever occasion has arisen, unless there have been some very strong reasons for making an exception.[29]

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[26] See *Scott, Magner & Miller et al., vs. Western Pacific Ry. Co*, 2 C. R. C. 626.

[27] See 2 C R. C. 626, pp. 628–35; also chap. 1, *supra*.

[28] See Johnson and Van Metre, *Principles of Railway Transportation*: 451 and 478.

[29] See *infra*, chap. 6 for discussion of long-and-short haul violations. For a discussion of the problem in California prior to the establishment of the present Commission, see Daggett, Stuart, *History of the Southern Pacific.*

Distance as a factor in rate-making is of importance only as it affects the cost of transportation.[30] Costs do not, of course, increase in proportion to the distance,[31] nevertheless, the farther a commodity is transported the greater is the cost of carrying it, provided other things are equal. It is just this proviso, however, that makes distance only one of the factors to be considered. But it is always an important one and stands as one of the tests of the reasonableness of rates. This attitude has been adhered to by the Interstate Commerce Commission and also by the California Railroad Commission.[32]

A review of some of the cases coming before the California authorities will illustrate the principle. In the case of *E. Tracy Crane vs. San Francisco–Oakland Terminal Railways* (Key System)[33] the complainant challenged the commutation rates of the defendant between Oakland and San Lorenzo. The distance between Twelfth Street and Broadway, Oakland, and San Lorenzo Junction was 10.49 miles, and between San Lorenzo Junction and San Lorenzo 1.76 miles, a total of 12.25 miles. The distance from the same point in Oakland to Hayward was 14.6 miles, this being two miles farther than to San Lorenzo. The commutation rate to Hayward, established by the Commission was $4.00 per month, while the company was charging $4.50 per month to San Lorenzo. Hayward and San Lorenzo traffic moved over the same line, in the same cars for the distance of 10.49 miles to San Lorenzo Junction. In view of the fact that no other counteracting influences were shown, the Commission concluded that a *prima facie* case of local discrimination had been established, and ordered it removed.

The principle governing this decision evidently was that, in the absence of intervening factors, distance should determine transportation charges for similar services. But the authorities have made it equally clear that distance is only one of many factors to be considered in determining rate reasonableness:

> It is well established that distance is always a factor to be taken into consideration in determining either the reasonableness of a rate by itself or its relation to rates to other points, but it is equally well settled that distance alone is not controlling. Competition is also an important element and there are various

30 Hammond, M. B., *op. cit.*:279.

31 The chief reason for this is that terminal expenses remain the same, regardless of the mileage of the movement.

32 See Holmes, F. L., *op. cit.*:122 f. for discussion of similar procedure on the part of the Wisconsin Railroad Commission.

33 3 C. R. C. 973. See also *Williams & Hannay vs. L. A. & S. D. B. Ry. Co.*, 1 C. R. C. 451.

other conditions, all of which must be taken into account in determining whether a particular rate or a system of rates is, as a matter of law, reasonable and not discriminatory [34]

Distance, in the absence of counteracting factors, is *prima facie* evidence of the reasonableness of transportation rates

The distance which goods or passengers are transported measures railroad service. Passenger rates are almost exclusively built upon the principle that rates should increase with distance. The mile transported is the unit of charge Non competitive freight rates are usually established in general conformity to the same principle; competitive freight rates may be Not only is the service performed greater, but the total costs incurred are greater as the distance increases . . . A *prima facie* case then can be made for rates based upon distance [35]

In adjusting passenger rates on railroads and interurban lines the California Commission has insisted that distance is the basic principle [36] Street railroad fares on the other hand are essentially on a flat rate. Wherever possible the one fare is charged within the limits of a given city. Where the boundaries of a city are very extensive, however, it is obviously impractical to use the flat rate and the zone system is used. In the latter case distance as a factor is recognized, at least to a certain extent [37]

The Interstate Commerce Commission has made elaborate studies of the distance factor as applied to freight rates and a whole series of mileage schedules embodying decisions on points of principle have occupied the attention of that body in recent years.[38] We have already noted that distance as a factor in freight rates has been recognized in California, but the authorities in this state have not developed the distance principle on a basis comparable with action of the federal commission. This may be explained perhaps by the fact that the California Commission's authority over freight rates is essentially one of adjusting complaints arising from local intrastate discrimination. Another reason is that the Commission has followed the lead of the Interstate Commerce Commission in the matter of railroad

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[34] *Pacific Rice Growers' Association vs Atchison, Topeka and Santa Fe Railroad, et al.*, 19 C. R. C. 248, 251 See also· *Richfield Oil Co vs. Sunset Ry. Co.*, 24 C. R C. 729; *Thropp vs B & L S. R. R.*, 49 I. C C. 43; *Northern Pipe Mfg. Assoc. vs C. N. W.*, 33 I. C. C. 360; *Western Rate Adv.*, 35 I. C. C. 497.

[35] Vanderblue and Burgess, *op. cit.*, chap. 10, p 139.

[36] *Modesto and Empire Traction Co.*, 10 C. R. C. 73; *Pacific Electric Railway Co.*, 16 C. R. C. 7; 21 C. R. C. 647; 22 C. R C. 236

[37] *Froehch vs. Los Angeles Railway Corp.*, 3 C. R. C. 30; *Ray vs. Pacific Electric Railway Co.*, 8 C. R. C. 142; *Los Angeles vs. Pacific Electric Railway Co.*, 13 C. R. C. 396; *San Diego Electric Railway Co.*, 17 C. R. C. 439.

[38] See Vanderblue and Burgess, *op. cit.*, chap. 10, for a detailed discussion.

tariffs, except where special local conditions required a modification. Even here the powers of the state authorities are limited by the fact that state-made rates must not place a burden on interstate commerce.

Section 24 (*b*) of Public Utilities Act lays down the same prescriptions as to long-and-short haul principles for telephone as for transportation companies In other words, distance is also to be a factor in telephone rate-making and telephone rate schedules are not to be made in disregard of it unless authority to do so is given by the Railroad Commission. This method of rate-making applies, of course, only to long distance messages and not to the rates within a particular exchange area In the application of the *Pacific Telephone and Telegraph Company* concerning its toll rates the Commission laid down the principle:

> That all toll rates be based on air line mileage. We know of no more scientific or just way of arriving at a basis for long distance telephone toll rates.[39]

The basic rate itself was set at \$.005 per air-line mile plus \$.05 terminal charge. It was decided that the initial period upon which rates should be based was two minutes, since an investigation into the time of long distance calls in California showed this to be the average per call. An extra charge of approximately 50 per cent of the initial one was to be made for each additional minute or fraction thereof.

Joint Rates

Cost of service may also be used as a measure of the reasonableness of joint rates.[40] As a general rule joint rates are less than the sum of the locals. One reason for this is that it usually costs less proportionally to perform the through service and hence the regulatory bodies compel a corresponding reduction in charge. In the case of *The Modesto and Empire Traction Company vs. The Atchison, Topeka and Santa Fe Railway Company*, Eshleman stated:

> It has not been customary for carriers in the voluntary establishment of joint rates to receive as their proportion of such joint rates their full local rates up to the junction point. I could refer to many joint tariffs on file with this Commission between two carriers where divisions of joint rates are much less than the full locals of participating lines. With the establishment of joint rates the participating carriers usually save the expense of one terminal charge, which is an important element to be considered in the establishment of through rates.[41]

[39] 3 C. R. C. 903, 904. See *E. H. Cookingham* 24 C. R. C. 455; *Southern California Tel. Co.*, 25 C. R. C. 721.

[40] A joint rate is a single charge made by two or more connecting carriers for a transportation service rendered by the coordinating companies.

[41] 1 C. R. C. 413, 415.

The relationship of joint to local rates was definitely laid down by Mr Eshleman in Decision No 1129, a number of cases involving joint freight rates being consolidated into the one opinion. This arose out of a complaint of the *Angels Lumber Company vs. The Sierra Railway Company of California, The Atchison, Topeka and Santa Fe Railway Company, and the Southern Pacific Company*[42] The complainants attacked the joint rates of the defendants as being unreasonable, while the railway companies at the same time asked permission to increase their through rates from San Francisco, Stockton, Sacramento, and intermediate points through Oakdale, the junction, to points on the Sierra Railway Company. The existing through rates had been based on a combination to and from Oakdale, but the local rates of the Santa Fe and the Southern Pacific to Oakdale had been increased and the carriers still desired their present locals to the junction as their share of the through rates

It was the commissioner's contention that the expense falling on each carrier in a joint movement was less than that falling on either of such carriers on local movements to and from their respective junction points. For example, on less than carload local movements each carrier must perform two terminal services Under these circumstances the shipments must be receipted for, waybilled, loaded at point of shipment, unloaded at destination, a freight bill made out and final delivery made at the edge of the platform to the consignee, by each of the carriers in question while in the case of a joint movement only two complete terminal services need to be performed, together with a registering of waybills in a transfer register at the junction point.[43] The same principle applies to carload shipments, with an additional saving of time since the car is held up at only two terminal points instead of four[44] Consequently the commissioner asserted that through rates should not be made up of a combination of locals.

> In other words, the practice is, under ordinary circumstances, to impose a less rate for the joint movement over two lines than is represented by the sum of the locals over the separate lines involved, and I believe that this practice is fully justified and that carriers are not within their rights under ordinary circumstances in imposing as a through rate a rate representing a combination of the respective locals.[45]

Although the authorities have ruled usually that joint rates should be less than the sum of the locals over the separate lines involved

[42] 3 C. R. C. 1017.

[43] *Ibid.*:1019.

[44] *Ibid.*:1020.

[45] *Ibid.*:1020. See also re *Joint Rates*, 5 C. R. C. 376.

yet this does not mean that they have held that a joint rate should be less than the total charge when the service is rendered by one carrier. On the contrary, it has been maintained that a two-line haul is entitled to a proportionately higher rate than a one-line haul. This question was definitely settled by the California Railroad Commission in the case of *Piedra Rock Company vs. Southern Pacific Company, and Atchison, Topeka and Santa Fe Railway*.[46] The complainant, the Piedra Rock Company, maintained that the local and joint rates on the lines of the defendants were unjust and unreasonable. The Piedra Rock Company situated at Piedra on the Santa Fe was in competition with other companies for sale of crushed rock in various parts of the state and claimed it could not absorb more than ten cents per ton and still maintain the competition. The Santa Fé was willing to blanket rates on crushed rock from Piedra to points on the Southern Pacific. The latter company showed that its joint rates from Piedra were almost uniformly higher by twenty cents per ton for a two-line haul than for the same distance on a one-line haul on its own line.

In deciding the case the Commission stated that railroad commissions generally, as well as the Interstate Commerce Commission, have recognized the principle that a two-line haul is entitled to a proportionately higher rate than a one-line haul. The authorities then proceeded to quote a large number of cases of the Interstate Commerce Commission to the effect that the latter body has on various occasions recognized it as just and reasonable for two or more independent lines, not part of the same management or making up a through route, to charge a somewhat higher rate for a two-line haul than would be deemed reasonable for a single-line haul, of equal distance. An analysis of the joint rates contained in the tariffs filed by the various carriers with the state commission showed that almost invariably the joint rates were higher on rock, sand, and gravel, than the local rates for the same distances, but not so high as a combination of the locals. Consequently it was decided, since existing joint rates compared favorably with similar rates applied under similar circumstances, that no change should be made, and the complaint was dismissed.

The guiding principle in these decisions on joint rates was evidently that of cost of the service rendered. Since the cost of carriage on a through shipment was less than the combined cost of the local

[46] 21 C. R. C. 895.

movements over the same route, the joint charge had to be as a rule, less than a combination of the local rates of the participating carriers. On the other hand, for just the opposite reasons a joint haul had to bear a higher charge than a one-line haul of equal distance under the same circumstances and conditions It should be remembered, of course that these conditions would prevail only where the cost of service was the controlling factor, which could be the case only when other things were equal.

The methods of the California Railroad Commission and the Interstate Commerce Commission in dealing with joint rates have been adhered to by most other important regulatory bodies For example, the Wisconsin Commission has said that "Joint rates are ordinarily fixed at a lower figure than the sum of the local rates on each line and at a higher figure than the local rate on one line for a like distance"[47] The Canadian Railway Commission has adopted the same attitude, and has also extended it to telephone tolls by prescribing through rates at substantially less than the sum of the locals.[48]

Additional Cost

Sometimes utility rates are based on the additional or extra cost incurred in rendering the service. Very often this is nothing more than the application of the value of service principle based on what the traffic will bear, the utility being willing to accept any rate above the additional or special cost incurred. Commissions will allow the application of this theory when the business cannot be obtained on any other basis. Such a method of charging obviously involves discrimination, but the justification of it lies in the fact that it relieves the other consumers, either directly or indirectly, of part of the total burden.[49]

It is rather difficult to say whether or not the California Commission holds to the theory that every public utility rate should bear at least the variable cost connected with supplying the service The opinions rendered in this connection do not state the *absolute* minimum which must govern rate-making.

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[47] Holmes, F. L., *op. cit.*:113.

[48] MacGibbon, D A., *Railway Rates and the Canadian Railway Commission*: 167–171.

[49] See 4 C. R. C. 843, *re* rates allowed to *San Joaquin Light and Power Company.*

In the application of the *Pacific Freight Bureau* to raise the less than carload rates on explosives Commissioner Loveland said:

> In the multitudinous rates which railroads have to make to transact their business, it is not to be expected that each particular movement considered a part by itself will yield something over the cost of carriage, ...
>
> Explosives are used by miners and by farmers and such use in the majority of cases probably produces other movement of tonnage for carriers, which fact may possibly account for the long continuance of the present tariff and minimum.[50]

This seems to mean that a particular rate may not even be required to cover the mere expense incurred by the rendering of the service, although it would appear that it must cover it indirectly.[51]

Mr. Eshleman made it very clear that a utility may not demand that each particular branch of its service yield a reasonable income, in *Associated Jobbers of Los Angeles vs. Southern Pacific Company* in which case the complainants attacked the reasonableness of the class and commodity rates of the defendant on a branch line north of Owenyo.[52] The railway urged that the country was sparsely settled, and that the earnings on the branch line were so small that a reduction was not justified. To this the commissioner replied:

> I think it proper to call attention to the fact that the asserted position of the carrier to earn a revenue on this branch line which will yield it a return upon the property of the branch line, is not well founded. In fact, it is well established that a carrier may not justify exorbitant rates on the ground that its line in the particular territory affected by such rates does not yield it a reasonable income.[53]

The inference in this opinion was that the average cost incurred in rendering a service did not constitute the minimum charge that could be made. If this were so then, presumably, addition cost set the lower limit.[54]

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[50] 1 C. R. C. 613, 615.

[51] See also *Western Union Telegraph Co.*, 31 C. R. C. 760 at 761: "When a telegraph utility has established that intrastate press rates result in an out-of-pocket loss and the increase requested will still leave the business a profitless one, applicant is entitled to the specific relief sought (*Northern Pacific R. R. Co. vs. North Dakota*, 236 U. S. 585)"; *Norfolk & Western Ry. vs. West Virginia*, 236 U. S. 605.

[52] 2 C. R. C. 659.

[53] *Ibid.*: 662.

[54] Some time after the above case Mr. Thelen made an exception to what he called the rule, in *E. L. Stewart vs. Great Western Power Company*. The following quotation shows his position:

"While it is the general rule that it is the duty of a utility holding itself out as being willing to serve a certain territory to incur at its own expense the necessary capital expenses and thereafter to serve the applicant at the published rates, there may be cases in which the expenditure necessary would be so large or in which the other conditions would be such as to make it unreasonable both from the point of view of the company and its other subscribers, to demand that

The *general conclusion we can draw from these cases seems to* be that there is no absolute minimum below which rates cannot go The principle established is that whenever possible the traffic should bear at least the additional cost incurred in handling it, either directly through rates paid or indirectly through the creation of other revenue traffic which will offset the losses incurred in the first instance. It is quite clear that a utility cannot demand a reasonable return on each particular service rendered, but it is also equally clear that no service can be rendered, the costs of which as compared with the returns, *create an unreasonable burden on other traffic.*[55] *It is evident, how*ever, that the Commission has recognized, under exceptional circumstances, the validity of rates in which the traffic was not compelled to bear all of the additional costs incident to it.

A case of great interest from the standpoint of the application of the additional cost theory was that dealing with the *Application of the Southern Pacific Company* for an increase in its transbay suburban rates between San Francisco and Alameda County. Commissioners Eshleman and Gordon presiding.[56]

The applicant maintained that not only did it not get a reasonable return on its investment but was actually conducting its business at an operating loss The engineers of both the company and the Commission made a very careful estimate of the property used and useful in rendering the suburban service. The difficulty in the case arose from the fact that the Southern Pacific operates a main-line service as well as a suburban one. In so doing it uses jointly the ferry boats plying between San Francisco and Oakland and also the terminal facilities at the Oakland pier The ferry boats and the terminal facilities are absolutely essential to the main-line passenger traffic of the railway company

The real problem at issue then was the determination of the portion of the investment in these joint facilities to be allocated to the suburban traffic. The company maintained that the apportionment should be on the basis of the number of passengers carried.

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the necessary extension shall be made entirely at the cost of the utility'' [*3 C. R. C. 1160, 1164*]. In this particular instance the company would have been compelled to incur an expense of approximately \$1150.00 for a return of only \$72.00 per year, and the commissioner considered this unfair to both the utility and its customers. The applicant was given the opportunity to receive service on condition that he pay the fixed charges on the extra investment necessary to serve him.

55 See *Los Angeles Gas & Electric Corp*, 13 C R. C. 724; *Southern Pacific Co*, 14 C. R. C. 742; *Midland Counties P. S. Corp.*, 24 C. R. C. 541.

56 5 C. R. C 555

The Commission maintained that since the transbay service was absolutely necessary to mainland traffic every suburban passenger who was carried on any boat necessary for transcontinental or local mainland business was so much advantage to the carrier. The cost for this suburban business, then, was additional and incidental to the other and therefore, it was maintained, the suburban passenger should get the benefit of it. The suburban business, the Commission argued, was essentially wholesale and therefore the rates should also be wholesale. Accordingly, the limiting minimum for these rates was the actual added cost to the carrier. On this basis the company failed to sustain the burden of its application and the case was dismissed. The attitude of the Commission on additional cost was set forth in the following language:

> In short, it has appeared to us that both the courts and Commissions have been in error in determining the lowest rate that a utility may reasonably and lawfully afford. This rate, the courts and the Commissions to the contrary, notwithstanding, may be and often is below the actual cost of performing an average unit service . . . . Therefore, when it becomes a question of performing or not performing the additional service, under the circumstances stated, the utility does not and should not look to the average expense of performing the unit of service, but looks to the added cost and the added revenue alone, which added cost may be much less than the average cost per unit, and which added revenue may be less than the average revenue that must be required per unit.[57]

The interpretation to be placed on this, especially in view of the decision on the case, is that additional cost should form the basis for charges for additional service.

It was also held:

> As regards the relation of the suburban to the main line business and the apportionment of values between the two. That the suburban and not the main line system should be considered the by-product as regards their relation to the applicant's ferry lines, and considering that the ferry service is essential to applicant's main line business, the suburban rates need not bear an equitable relation to the unit cost of such service but should be considered upon the basis of the added cost to perform the additional service and the added revenues derived from such service. That suburban service, is essentially wholesale, and it is therefore erroneous to apportion units costs and divisions of property on equality with the service essentially retail and entirely different.[58]

Consequently the Commission adopted the additional cost involved in performing this suburban service as the rate base and concluded that the company had failed to sustain its case for an increase in rates. Such an application of rate-making theory would appear to make it necessary in every case where common costs are involved to

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57 *Ibid.*:570. 58 *Ibid.*:556.

regard one part of the traffic as wholesale, and the other part as retail. Which is which, would apparently depend purely upon the whim of the authorities in charge of the case. In the instance in question it would appear that this theory was called upon merely to keep rates down since the commissioners contended that it was necessary for them to prevent an enormous confiscation of property of people who built in the territory served by the application on the expectation that transbay rates would be reasonable.[59] Why suburban traffic should be regarded as wholesale is very hard to comprehend. Why should the idea of a fair return on the fair value have been thrown overboard so completely here? If the Wells Fargo Express business and property could be apportioned as between interstate and intrastate business,[60] why could not the same line of reasoning have been used in this case? The opinion rendered leaves a suspicion that the decision was based on the "value of service," or "what the traffic will bear" concept, and if this was actually the case then the authorities should have stated so, definitely. If cost was the basis used, then the differentiation between wholesale and retail traffic seems to have been unwarranted.

The verdict appears to have been based in reality on value of service, although ostensibly based on cost. Such a method of rate-making should be severely condemned. The authorities should take a definite stand in making rate decisions according to the needs of the case in hand, and state clearly what that stand is, regardless of whether or not the theory enunciated harmonizes with principles previously used. On no other basis can the regulation of rates by public agencies be satisfactory or equitable.[61]

This criticism, however, in no way detracts from the value of additional cost as a criterion for rate regulation. Its usefulness is so apparent and its application so widespread that it is a principle that must be recognized whenever the charges of an industry operating under joint costs are to be considered.[62] It sets the minimum below which rates for particular services should not fall unless for some very special reason; it is in reality a phase of value of service

[59] See also *S. F., Napa & Calistoga Ry.*, 13 C. R. C. 95.

[60] See *supra*, chap. 2.

[61] For a similar criticism of the valuation proceedings of the Interstate Commerce Commission see the dissenting opinion of Commissioner Potter in *re Florida East Coast Railway Company, and Atlantic East Coast Terminal Company*, 84 I. C. C. 24.

[62] See Jackman, W. T., *Economics of Transportation*, chap. 4; Jones, Eliot, *op. cit.*, chap. 4.

or what the traffic will bear. Its use lies in the fact that the charges for services may have to be based on value rather than cost, the additional cost incurred in rendering the service merely setting the lower limit for the rate.

CHAPTER V

WHAT THE TRAFFIC WILL BEAR

Introduction

In a somewhat different category from cost of service as a principle in rate fixing is the principle of "what the traffic will bear" While the basic stand of a rate-making body may be on cost, yet it is seldom possible to apply cost formulae without modification The flexible element in rate-making is supplied by the principle of "what the traffic will bear" Of course, this principle lies behind all prices, but in the case of a monopoly it may be abused to the extent of interpreting it to mean "all the traffic will bear" Applied in its real and most valuable sense in public utility rate-making, however, it takes fully into consideration the interests of both the consumers and the producers of public utility services [1]

In this country, at present, the determination of rates by regulatory bodies is based upon "what the traffic will bear" or "value of service" only when the cost principle breaks down. In actual practice this is a frequent occurrence. Rates for particular services are fixed largely by "what the traffic will bear" simply because, first, it is not possible to determine the cost of individual items of service, and second, because every item cannot be made to contribute its due share to the income of the corporation Hence the total income has to be obtained by charging what each item can pay, the upper limit being the total revenue required, the lower, additional cost Within these bounds demand is the decisive factor.

Besides being the prime factor in individual rates, "what the traffic will bear" may also be used to determine the general level of

[1] Value of service or charging "what the traffic will bear" has been interpreted by many writers to mean the charging to each utility customer whatever he is willing to pay rather than do without the service According to this interpretation the attention of the producer is focused solely on demand. But this is not altogether in accordance with the use of the term value in economics. Value as used in economics takes into consideration carefully the forces of both demand and supply, and any theory of value which ignores either one of these forces is obviously erroneous. Yet strange to say, most opponents in attacking "what the traffic will bear" seem to ignore the supply aspect of the question and charge those who advocate "what the traffic will bear" as a basis for rates, with inconsistency if the latter use cost in any form whatsoever as an aid in determining reasonable rates.

rates This is of necessity the case when the demand for service is such that it is impossible to obtain a "fair return." Again this approach is necessary because cost of service has broken down.

"What the Traffic Will Bear" applied to the general rate level—

As we have already seen, the fundamental basis used by commissions and courts in the United States in determining the general rate level has been that of a fair return on a fair value The theory is not capable of universal application, however, and many conditions arise which often make it impossible to utilize such a theory For example, although the Transportation Act of 1920 requires the Interstate Commerce Commission to fix railroad rates so that the companies receive a return of 5½ per cent on the aggregate value of their properties, yet so far this has not been attained, presumably because the traffic will not stand it, some other principle has to be used to determine the general level of charges. This other principle is "what the traffic will bear."

The use of this theory by the California authorities, in fixing the general level of rates, was well exemplified in the opinion rendered by Mr. Thelen in re-*L C Cole et al. vs South Feather Land and Water Company*, in which the complainants attacked the rates of the company as being unjust and unreasonable[2] The investigating engineers found the present value of the property to be $300,604 00. The defendant's counsel frankly admitted that if the company tried to get a fair return on this base it would lose its customers entirely and the company did not wish to raise its price that high, even if the Commission were willing to do so Evidently the idea underlying the desires of the company was to charge "what the traffic would bear," and it was on this basis that Mr Thelen fixed the rates of the company.

The decision which established the precendent that the reasonable ability of the consumer to pay was the limiting charge a public utility could make, was rendered by Mr. Thelen in re-*W. J Rogers and Central Pacific Land and Lumber Company vs. Sacramento Valley West Side Canal Company and W. F Fowler; and Sacramento Valley Realty Company et al. vs Sacramento Valley West Side Canal Company and W. F. Fowler.*[3] The complainants attacked the rates of the respondent on the ground that they were discriminatory, exorbitant, and unjust. The evidence showed conclusively that the system as built

[2] 4 C. R. C. 1392. [3] 7 C. R. C. 113.

was capable of serving many more consumers than were in the district at the time of the controversy. Hence a reasonable return on the investment was entirely out of consideration. Some other standard of rates was needed.

The Commission took the attitude that utility rates must never under any circumstances be more than the reasonable ability of the consumers to pay; that rates must in no event be higher than the service rendered is reasonably worth to the public. We quote from the opinion:

> In the present case it is as impossible from a practical point of view as it is unjust from an ethical point of view to expect the limited number of consumers of water under defendant's irrigation system to pay the entire cost of running the system . . . .
>
> Another element which must be taken into account in establishing the rates in this case is the *ability of the consumer to pay*. It is a well established principle of public utility regulation that whatever rates might be secured from the application of the usual principles of valuation, a public utility can in no event charge a rate *which is beyond the reasonable ability of its customers to pay*. The rates must be reasonable to the utility, but they must in any event, *be reasonable to the public*.[4]

Although Mr. Thelen failed to state how the reasonable ability of consumers to pay could be determined, he did state that he did not mean that a utility could charge up to the maximum of what the consumer *could pay*, and he cited *Covington and L. Turnpike Road Company vs. Sanford*, 164 U. S. 578, and *Smyth vs. Ames*, 169 U. S. 464, as his authorities.

The decision rendered was an example of the use of value of service for setting the maximum rate which a utility was allowed to charge, the value of the service in this instance being measured by the reasonable ability of the consumers to pay. Of course it was for the Commission to decide from the evidence what was the reasonable ability, and it is always for the courts and commissions to decide finally what this is. But, it will be noted, *reasonable ability* to pay sets the upper limit of rates regardless of the fact that it may be *possible* for a utility to get more for the time being at least.

This case shows clearly that where monopoly conditions exist the upper limit of rates is what the *authorities* think the consumers can reasonably afford to pay. Thus "what the traffic will bear" under these circumstances is what the commissions and courts consider to be the fairest rate to both the utility and its consumers. Conditions such as these present a delicate situation in rate-making, since, if the

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[4] *Ibid.*:144–5; italics mine.

rate is put too high, the development of the community may be retarded and the company ultimately worse off than ever. If the rate is made too low the utility may be faced with severe financial difficulties, and be unable to supply the necessary services. In both cases both the utility and the consumers would be injured.[5]

The influence of the "value of service" or "what the traffic will bear" theory on rate-making practice was well shown again in the decision rendered by Commissioner Martin in re- *Application of Cuyamaca Water Company* for an increase in water rates.[6] A very careful investigation was made into the valuation, costs of operation, and needs of development of the company, but representatives of the consumers contended that rates should not be determined on the investment theory. The Commission also made an investigation of the value of the service rendered by the water company and also of the effect of rate increases on the use of water. Records of use under other systems throughout the state showed that when rates were materially increased the use of water decreased. (The Commission failed to state at what rate the use decreased.) The consumers stated that if rates were increased very much they would install pumping stations. It was evident that a rate schedule which would yield a fair return on any rate base that might reasonably be devised, would have been far more than the traffic could bear. At the same time the Commission decided that the company was entitled to more revenue, and that the service was worth a greater sum than the consumers were paying. As a result a rate was established which it was estimated would yield to the applicant the greatest possible income without creating financial disaster to the farmers and other water users in the district served.

This case seems to be an excellent example of charging "what the traffic will bear" in the truest sense of the word. The needs of both the consumers and the company had to be considered very carefully and the Commission had to weigh the conditions of supply and demand very thoroughly. It does not appear that the rate schedule was based on the monopoly principle, but rather on the idea of securing the greatest financial returns for the company commensurate with the greatest possible benefit to the consumers. If the people

[5] For other decisions based on the ability of the consumer to pay, see: 7 C. R. C. 236; 7 C. R. C. 276; 7 C. R. C. 279; 7 C. R. C. 284; *re*-warehouse rates. In these cases the ability of the consumer to pay had to be taken as the basis simply because rates based on the value of the property would have been prohibitory.

[6] 18 C. R. C. 897.

had been given the rate they wished the company would have been unable to render adequate service; if the company had received the rates it wished the consumers would have been unduly burdened. The solution of the Commission was to weigh both sides as carefully as possible and to prescribe charges which would be just to both when the interests of each were considered jointly.

We have already seen, in chapter III, that when a company is in its developmental stage, it cannot expect to receive a fair return on its total investment. We have also seen how often, under these circumstances, the Commission has scaled down the rate base by estimating the reasonable investment in the property used and useful, at that time, in the service of the public, and has then prescribed rates which it was estimated would give a fair rate of return on that rate base.[7]

Another method of determining what rates should be when a company is in its developmental stage, has also been used, namely, the value of service principle and the ability of consumers to pay. The approach corresponds to that used in the decisions discussed above. The Commission in these cases has considered carefully the needs of the companies and the circumstances of the consumers and has then prescribed rates that were estimated so as to bring the best results considering both the utilities and their customers.

This was the principle adopted by Commissioner Benedict in re- *O. H. Fett, A. V. Foerster and Henry Sheridan vs. Emil Firth and Los Angeles Trust and Savings Bank; and Application of Emil Firth* for an increase in water rates.[8] The defendant was a very small water system but the tract which it served was only in its developmental stage, and the Commission stated that it was impossible to use the investment basis. No attempt was made to establish a rate base on the theory of property used and useful in the service of the public. Instead, rates were prescribed which were considered to be reasonable both to the consumers and the utility.

A similar opinion was rendered by the Commission, sitting as a body, in the *Application of Lookout Mountain Park Land and Water Company* for an increase and adjustment of rates.[9] The company claimed that the rates it was charging at the time were not meeting even operating expenses. The Commission estimated the original cost of the system and the amount of revenue necessary to produce a reasonable return on this. It was decided, however, since the utility's

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[7] For example see *Southgate Gardens Water Co.*, 26 C. R. C. 506.

[8] 20 C. R. C. 783. [9] 22 C. R. C. 271.

business was still in its developmental stage, that it would be unreasonable to require the present consumers to pay a full return on the investment. Consequently, a rate schedule was prescribed which was considered equitable to both the company and its consumers

The establishment of ability to pay or "what the traffic will bear" as the upper limit in rate-making is based not only on the orders of courts and commissions but also on the frank recognition of the utilities themselves of the economic necessity of such a policy, regardless of whether rates so determined give a reasonable return on the investment or not. If the rate base arrived at by any theory whatsoever sets a charge which is beyond the reasonable value of the service, then such a base must be discarded, and the value of the service to the consumer must be the standard if the utility is to continue to do any business at all.

Although the Transportation Act of 1920 fixed a fair return on a fair value as the standard for the general level of transportation charges in the United States yet this has never been the gauge in this country. Prior to 1920 there was no such statutory prescription; since that date rates have not reached that level although the Interstate Commerce Commission is supposed to be legally bound to see that they do. "What the traffic will bear" has obviously set the general level to date.

In England the railroads have never been bound by such regulations as to the general level of charges, while the application of such a method of rate-making in Canada has been and still is quite impossible because of the peculiarities of Canadian railway geography, and the extent of Canada's transportation system as compared with her population Hence the value of service sets the rate level in both of these countries.[10]

If it were necessary to take at their face the pronouncements that a public utility can in no event charge a rate which is beyond the reasonable ability of its customers to pay, then some significant constitutional and practical difficulties would arise. The refusal to allow a utility to collect a fair return on a fair value on the ground that this would deprive consumers of a fair profit, would raise some exceedingly complex problems concerning the conflict of property rights. It would also necessitate the definition of what constitutes a fair profit to the consumers. The complications of the latter issue would be so multifarious as to defy all analysis and control.

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[10] Jackman, W. T., *op. cit.*, chaps. 6 and 18; MacGibbon, D. A., *op. cit.*:101 f.

Fortunately, the problems presented in the above discussion do not need to be solved. As a matter of fact the introduction of ethical connotations into the concept of ability to pay seems somewhat tenuous. An analysis of the decisions and of the facts involved demonstrates conclusively that "ability of the consumer to pay" is defined not in ethical but in pragmatic terms. In the situations discussed in this chapter the authorities have been faced with cases where an attempt to secure a fair return would "kill the goose that lays the golden egg." Of course, it certainly would have been possible, in some instances at least, to allow higher rates than those actually prescribed, but a farsighted viewpoint dictated otherwise and the companies naturally subscribed to such a policy.

What the Traffic Will Bear and Particular Rates

Although regulatory bodies today are emphasizing cost as the basis for rate-making, yet value of service or "what the traffic will bear" still remains the chief factor in the fixing of particular rates, especially in the transportation industries. This is due to three reasons: (1) because utilities are generally industries of joint cost, (2) because the cost of service is of much less importance to some commodities or consumers than to others, (3) because many factors other than cost must enter into the determination of rates. Consequently the apportionment of charges for particular services with prime attention to the demand situation is the only practical method under such circumstances.

Value of the commodity—

One of the ways in which value may be used by transportation companies as a gauge for particular rates is by making charges according to the value of the article transported, the rate in each case being determined on a comparative rather than an absolute standard. Low-grade commodities are accorded low classification and low rates by transportation companies, both as a matter of justice and of expedience.

The effect of the value of the commodity on rate-making is well illustrated by a quotation from the Southern Pacific Company's tariff:

When rates on ore, concentrates, sulphurets, metal, bullion, matte, etc., of value in excess of $100.00 per ton of 2000 pounds are not specifically shown between any two points in this tariff rates for valuation in excess of $100 per

ton of 2000 pounds, but not over $200.00 per ton of 2000 pounds will be 120 per cent of the rates applicable on ore, etc., of $100.00 per ton of 2000 pounds valuation; on valuations in excess of $200.00 per ton of 2000 pounds but not over $300.00 per ton of 2000 pounds, rates will be 140 per cent of the rates applicable on ore, etc., of $100.00 per ton of 2000 pounds valuation; on valuations in excess of $300.00 per ton of 2000 pounds the rate will be made by adding to the rate given for $300.00 two per cent on the value above $300.00 per ton of 2000 pounds.[11]

According to this the rates vary directly with the value of the particular commodity in question.

In the case of *Mammoth Copper Mining Company of Maine vs. Southern Pacific Company*[12] the complainant charged that the rate of the defendant on blister copper in carloads from Kennett to Oakland Long Wharf and San Francisco was unreasonable. This rate had been fixed by the Commission at $6.90 per ton of 2000 pounds, minimum carload 30,000 pounds, value not to exceed $400 per ton. The copper company contended that it produced copper worth considerably less than this and that therefore it should have a lower rate on such copper. It was maintained that shipments often had as low value as $335 per ton.

In the original decision the Commission established the rule for ascertaining the rate on ore and the like, of value in excess of $100 per ton, by taking certain increasing percentages of the rate or value as the value per ton increased. This same rule was followed in the case in hand and the new rate was set at $4.90 per ton of 2000 pounds on blister copper, value not to exceed $300 and an additional 2 per cent of the value on any value above $300 per ton of 2000 pounds.

The value of the commodity as a basis for transportation charges has been recognized by all commissions. Indeed, in its first annual report the Interstate Commerce Commission stated that the value of the article transported was the most important element to be considered in determining the charge to be made. This position has certainly not been adhered to, but, nevertheless, the value of the commodity has been given considerable weight in classifying commodities and the railways have been desirous of using it, to a much greater degree than they have been permitted to do.

The federal body has also on some occasions allowed a different classification of the same commodity according to the use to which it

[11] Quoted from 1 C. R. C. 993, *Mammoth Copper Mining Company of Maine vs. Southern Pacific Company*, p. 995.

[12] 2 C. R. C. 224. See also: *Carnegie B. & P. Co. vs. W. P. R. Co.*, 6 C. R. C. 187; *Leake vs. Northwestern Pacific R. Co.*, 5 C. R. C. 767; *Riverside P. Cement Co. vs. S. P.; L. A. & S. L. R. Co.*, 6 C. R. C. 293.

has been put At other times it has refused to do so The California authorities have adhered to the latter stand [13] At the same time practically all the commissions have been unanimous in their attitude that rates cannot vary automatically with the price of the commodity [14]

The logical connection, or perhaps one should say distinction, between the value of a commodity and the value of service of moving a commodity is not obvious The Interstate Commerce Commission has insisted that the value of a commodity is a factor that must be given consideration in fixing rates. "The value of an article, not its use, is one of the determining factors [15] It might be pointed out, however, that this distinction is reminiscent of Adam Smith; the view of modern economics is that the value of an article cannot be considered independent of the use to which the article is put Analysis seems to show that the connection between rates and the values of commodities arises basically from other factors. The cost of transporting more valuable commodities is greater than the cost of transporting lower grade goods For example, there is the greater risk involved. Then too, it usually happens that those commodities having a higher value per hundred pounds are the light and bulky ones and this means a relatively greater cost of rendering service Finally, commodities of higher value are frequently able to "stand" a higher rate than commodities of lower value.

In the latter instance of course, the principle is not the "value of the commodity," but "what the traffic will bear,"[15a] and, it should be noted, these two terms are not identical It is quite possible that commodities of relatively high value, produced under very keen competition, might not be able to stand as high a rate as commodities of a lower value (per 100 pounds) produced under less competitive stress Daggett very well says.

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[13] See *Pacific Fibre and Retarder Co vs Sou. Pac Co.*, 13 C. R C 61; *Rivers Bros. Co. vs. S P Co.*, 5 C. R C 651; *Stockton F. & L. Brick Co vs S P Co.*, 11 C. R. C. 578, 580; *United Dredging Co. vs A T. & S F Ry*, 22 C. R C 559, 560. See also chap. 8 *infra*

[14] For fuller discussions see, Ripley, W. Z, *op cit.*, chap 9.

Hammond, M B.. *op cit* :11 f.

Jackman, W. T., *op. cit.*, chap. 5.

MacGibbon, D. A., *op. cit.*:191 f.

The California Commission follows as nearly as possible the same classification as that employed by the I. C. C ; hence the principles employed in each case are essentially the same. See *Re-Classifications*, 1 C. R C 62.

[15] *Western Classification Case*, 25 I C. C. 442, 499.

[15a] This is evidently the way in which Ripley analyzes the "value of the commodity" as a means for fixing particular rates. See *Railroads, Rates and Regulation*:315 f

Doubtless it is usually roughly true that the movement of a commodity which retails for $1000 will be less impeded by a $5 rate than will the movement of a commodity which retails for $10. But there are cases where this is not true, and there is, apart from the observed fact, no logical reason for identifying the demand for an article with the demand for a service rendered to that article. . . . Values and differences in values are obviously distinct.[16]

In California the value of a commodity as a means of determining the reasonableness of rates has been a comparative rather than an absolute standard. The discussion of this phase of rate-making has been deferred to Chapter VIII.

Willingness and ability to pay—

Another way to determine particular rates on the value principle is by apportioning charges as between the various consumers in accordance with what they are able or willing to pay. The California Commission has used this theory extensively and has recognized the fact that rate-making is largely a question of sound judgment based upon the needs of each case, rather than one of mere mathematical calculation. As a matter of fact, even though other circumstances be ignored, it is quite impossible to calculate exactly what a particular rate should be if a utility is rendering more than one kind of service.

When the authorities have determined the total charges necessary to a utility this burden must be apportioned between the various customers of the utility. Primarily because of the varying conditions surrounding the consumers, it is essential that the individual charges be determined on the basis of ability to pay.

The use of this principle was well illustrated in the *Application of James A. Murray and Ed. Fletcher* for an increase in water rates.[17] The general level of rates for the utility was fixed by Mr. Eshleman on the investment basis in accordance with the *City of Palo Alto vs. Palo Alto Gas Company* decision.[18]

It was found that the company required a gross revenue of $66,825.03, which meant that the earnings had to be increased by $42,286.68, annually. But while the general rate level was determined on the investment theory, the apportionment of the burden, between the domestic consumers and those requiring water for irrigation services, was based on ability to pay. It was decided that:

[16] Daggett, S., *Principles of Inland Transportation*, p. 364. See also: *Union Tanning vs. Southern Railway Company*, 26 I. C. C. 159: "Value is a factor in classification for two reasons: because carriers incur a greater risk in transporting more valuable articles and because value is generally indicative of the ability of a commodity to pay transportation charges."

[17] 2 C. R. C. 464.

[18] *Ibid.*:503.

> As much of *this added* burden as is possible should be placed upon the domestic consumers for two reasons First, this class of service is more expensive, both to serve originally and thereafter to maintain, and second, *it will stand without hardship such increase.* This second reason for a higher rate is recognized in every class of utility and its validity as regards freight classifications is so well established that it is unnecessary to cite authorities. Gold ore is no more expensive to transport than coal, yet it may be and is assessed a much higher rate proportionately than the slightly added risk at all warrants.[19]

The burden the irrigation consumers were asked to bear was simply the difference between the total received from the domestic consumers and the total gross revenue the Commission allowed the company to receive

The necessity of recognizing this principle in rate-making was emphasized again by the Commission in its decision concerning the *Application of the Southern California Edison Company* for an emergency increase in electric rates.[20] The Southern California Edison Company claimed that by reason of a shortage in hydro-electric power, its operating expenses would be greatly increased and its net revenue correspondingly reduced Consequently it asked for permission to place in effect for a period of nine months temporary increases in rates, that is, surcharges, that would aid in offsetting the reduction in net revenue. The majority opinion granted the request of the company but recognized that special considerations should be given to the serious economic conditions affecting agriculture, in distributing the burden arising from the granting of an increase in revenue. In summing up the situation the commissioners stated·

> Electric schedules are more or less complex and are so because they are intended to spread the burden as equitably as possible, taking into consideration the widely divergent conditions under which power is used, and the varying costs of delivering such power at the places at which it is wanted. *The relation which* a schedule affecting one class of consumers should bear to all other schedules is a matter of sound and discerning judgment and is not susceptible of determination with mathematical exactness Thus it cannot be assumed that the relation established last year between the agricultural power schedules of this utility and all other electric schedules on this system then was and now remains mathematically exact and not subject to variations in any particular.
>
> We are, therefore of the opinion, in view of the reasons above set forth, that the exemption of the agricultural schedules from a percentage increase in rates in the present circumstances will not result in unjust or undue discrimination against any other class or classes of consumers.[21]

Hence it was decided, in view of the conditions in the agricultural industry, that the agricultural consumers should be exempted from

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[19] *Ibid.*, 521; italics mine.

[20] 25 C. R. C. 461. For a full discussion of the facts of this case see chap. 3.

[21] *Ibid.*, 467-468.

any increase in rates The extra burden arising from the surcharge was apportioned among the other consumers who were more able to bear it.[22]

Besides allowing and prescribing rate differentials based on the *relative abilities* of the various parts of the traffic to bear the charges, commissions have also found it necessary to grant differentials on the basis of *willingness* of the various consumers to pay. The reason for such a differentiation is the possible inability to secure certain traffic if an attempt is made to force it to bear its full apportionment of the charges; the service, indeed, may not be worth the charge if some alternative source is cheaper.[23]

This principle was applied by Mr Eshleman in his decision re *Kern County Merchants' Association vs California Natural Gas Company*.[24] The complainants in this instance alleged that the rates of the defendant were unjust and unreasonable and asked the Commission to fix just and reasonable charges. The general level of rates was fixed on the investment basis but it was found that at non-peak times there was considerable excess gas which could be disposed of to the San Joaquin Light and Power Corporation for fuel purposes If this surplus were sold it would obviously relieve the regular customers of a considerable burden but this could be done only if the rates to the San Joaquin Company were made lower than the average cost Consequently, the Commission decided to allow a lower rate "for excess gas over and above all demands for other purposes, for delivery to large consumers for fuel purposes"

Exactly the same sort of situation was faced again by Mr. Thelen in the application of the *Pacific Gas and Electric Company* in which the utility asked permission to charge a rate to the Diamond Match Company that would not yield a fair return upon the investment in the equipment used.[25] The utility wished to give the Match Company a contract rate for a period of five years of 65 cents per kilowatt hour. If the Commission did not allow this there was danger that the company would seek other sources of power. But at the same time the rate proposed yielded little above the bare cost of service, excluding interest on equipment. The Commission, however, was

[22] As a matter of record the increase never went into effect, because the Commission, upon rehearing, reversed its first decision and would not allow the company to make the increase that had been granted.

[23] For a fuller discussion of this phase of the problem see chap. VI on Competitive Rates, and chap. VIII on Comparative Rates.

[24] 4 C. R. C. 843.

[25] 5 C. R. C. 399, *see also* 7 C. R. C. 79.

forced to allow the charge because it was all the traffic would bear, and the utility could not afford to lose that business. As Mr Thelen said:

> Furthermore if Pacific Gas and Electric Company should lose this business, the investment which the company has made already under the former contract to serve *Diamond Match Company* might be rendered valueless except for scrap.[26]

These two cases show very clearly the application of the farsighted view of "What the traffic will bear." Rates were accorded in each case, *not* on the basis of *cost*, but *according to* "what the traffic would bear," that being not all the consumers *could* pay but what they were willing to pay. Such an apportionment worked to the benefit of all concerned, customers and producers alike.

When the rate level of a utility is altered, the problem arises of distributing the increase or decrease over the various consumers. Seldom can horizontal changes in the whole schedule be made because of the nature of the demand. Consequently it is necessary to resort to the use of "what the traffic will bear" as one of the factors in the adjustment. The case of *Thomas Monahan, Mayor of San José vs Pacific Gas and Electric*[27] affords an illustration. The general level of rates for the San José district was determined by estimating the cost of the property used and useful in serving that area as of December 31, 1914, and allowing a fair return thereon. To secure this return it was necessary to raise the rate level. This at once raised the problem of distributing the burden of the increase. Although it had been possible to fix the general level of rates on the cost basis, it was impracticable so to determine the individual items of the schedule because of the nature of the demand. The electrical energy supplied by the company was being used for domestic and commercial lighting and agricultural power. As a matter of general principle the commissioner felt that each class of consumers should yield an adequate return upon the investment used in its service. Because of the conditions existing in the district of San José, however, he concluded that lighting rates should be uniform throughout the entire area although there was no uniformity of cost in rendering the service. He also decided that there should be no increase in rates charged for agricultural power. It was impossible to make the consumers of this bear the total cost attributable to it, because they had the alternative of resorting to the use of gasoline engines.

[26] 5 C. R. C. 399, 400.

[27] 8 C. R. C. 566.

Under the existing schedule of rates prescribed, one group of consumers was yielding more than a fair return while the other was yielding less. This decision was based on the theory that although each class of business should at least yield a revenue such as would not under average conditions create an additional burden on other classes of consumers, yet it was not necessary that all classes of service should show the same degree of profit. Moreover, if the company lost its agricultural power consumers the remaining customers would have a heavier load to carry. Under the circumstances only one decision was possible. The reason for apportioning the burden on such a basis was not because Mr. Thelen thought that justice demanded that the rates be based on ability to pay, for in his mind there was "considerable question as to the equity of placing the burden, created by service supplied to one class of consumers which in itself may not be able to yield an adequate return, upon other and more fortunately situated classes."[28] To him the question was purely one of expediency.

The Commission has, however, on other occasions justified the application of this principle of rate-making not only on the ground of expediency but also of justice. Commissioner Edgerton emphasized the fact that regulatory bodies should keep the sociological features of rate-making in mind when they are making rate schedules, in the *Application of the Los Angeles Gas and Electric Corporation* for the fixing and classification of gas rates.[29] The commissioner determined the total sum to be allowed as gross revenue by granting the company a net return of eight per cent on its actual investment.

In regard to the matter of spreading the burden between its customers, the company urged that it should not be spread over each group exactly in accordance with the cost of producing such service to such group, but, on the contrary, that serious consideration should be given to the needs and condition of the small consumers with a view to lightening their burden by the assessment against larger consumers of a somewhat disproportionate share of the cost of service.

To this Commissioner Edgerton replied:

> I believe the contention of counsel is sound, that in rate-fixing the so-called sociological feature should be recognized. It would be absurd, merely for the purpose of scientific exactness, to place upon small consumers a burden which they could not bear. This of course would result in their abandoning the service and unless their rates had been causing the company a positive loss their departure from the system would result in increased costs to the remaining consumers.[30]

[28] *Ibid.*: 581. [29] 13 C. R. C. 724. [30] *Ibid.*: 733.

To sum up: The principle of charging "what the traffic will bear," as used by the California authorities in determining particular rates, has been applied in two ways: first, in cases where the dependence of the consumers upon the utility for its services is such as to make it possible for the company, if unregulated, to charge exorbitant rates. The reasonable ability of the consumers to pay has set the standard, the interests of both the producers and their customers being carefully considered. Second, in cases where it has been necessary for the utility to accord special rates in order to secure the traffic. The willingness of the consumer to pay only a certain amount, because he was not dependent on the utility for the service, has decided the issue.

This method of rate-making has been used and recognized by courts and commissions alike all over the world as a sound means of determining utility charges and apportioning the burden upon the customers. Indeed, as Ripley says, it has been the great "Dynamic force in rate-making." In the final analysis, "what the traffic will bear" is always a basic factor since no rates can be fixed beyond that limit. Even when the cost principle is applied its success is dependent upon the ability of the traffic to stand that cost. At all times demand sets the upper limit to price, but of course it does not follow that utilities are or should be allowed to secure all the consumers can pay.

CHAPTER VI

COMPETITIVE RATES

Introduction

Experience has shown that unregulated competition between natural monopolies is quite unsatisfactory. For the time it promotes waste and a chaotic condition from which monopoly emerges and then the public is forced to suffer for the past. To prevent all this, public utility regulation has been developed; but that does not mean that competition has disappeared.

While monopoly under the supervision of state authorities does prevail in many instances, nevertheless competition in some form remains to a large extent, but, in the case of public utilities, it is a competition that has been brought under the control of the state, and thus has become regulated competition. Rates made under the stress of competition really form another aspect of rate-making based on "value of service," or "what the traffic will bear."

In spite of this change, which has come about as the result of experience, competition still forms a very important basis for regulation.[1] What commissions are supposed to have done is to have removed the evils of rate wars and the consequent instability in both charges and earnings, while at the same time they have retained the advantages of rivalry. Practically, therefore, all that has been accomplished is the removal of cut-throat competition. The competitive conditions still existing, in so far as they affect rate-making, may be most conveniently discussed under the following captions: competition of companies, market competition, and the long-and-short haul principle. There is one other competitive condition, namely, competition as to service offered at the rate established by the supervising authorities. This form or method of competition may be used effectively to promote efficiency in circumstances where the rate itself has been fixed and competition as to prices has been prevented by prescribing the charge to be made for a given service.

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[1] E.g., Transcontinental freight rates, and freight rates in the Trunk Line region.

Competition of Companies as a Factor in Rate-Making

As a means of controlling public utility rates, the competition of companies under the watchful eye of a supervisory authority may be a very good and valuable thing, for it will tend not only to keep down costs but also to promote efficiency. Many students of the problem of rate regulation even go so far as to say that the competitive basis alone should be used to determine the rate level. While this is perhaps an extreme stand in view of the monopolistic tendencies of public utilities, it is nevertheless a fact that there are very few public utility corporations which do not face some kind of competition. In other words, complete monopoly is practically a myth.

One of the forms in which this competition manifests itself is in the rates charged. Where a service may be rendered by one or more than one agency the difference in the charges made constitutes an important factor in the decision of a person requiring such service. This is well shown in the matter of freight rates. In continental countries railways are compelled to charge at least 25 per cent more than the waterways charge for the same work.[2] In the United States freight rates have been lower in regions where water competition is present than in those where it was not.[3] The same influences have been at work in California and have modified accordingly the charges made by utility corporations. For example, it was estimated, in the case involving the investigation of the joint rates of the *Western Pacific Railway Company and the Nevada-California-Oregon Railway*, that there had been a saving of $44,860.00 to shippers via those lines, from May to December 1910, owing to competition with the Southern Pacific.[4] This sum represented the difference between what the shippers actually paid for transportation and what they would have had to pay via the Southern Pacific before the Western Pacific was built.

Although the California authorities encourage competition and at all times hold the threat of potential competition over the heads of the utilities, nevertheless they will not countenance rate wars, nor will they allow losses from cut-throat competition to be made up in non-competitive territory.[5] This opinion was expressed in the *Appli-*

[2] See *Report of the Royal Commission on Canals and Waterways*, vols. 6 and 7. Also Moulton, H. G., *Waterways vs. Railways*.

[3] See *Preliminary Report* of the Inland Waterways Commission, 1908:31. See also 6 C. R. C. 293 for discussion of the effect of water competition in California.

[4] 1 C. R. C. 1.

[5] See *infra* chap. 8.

cation of the Northern California Power Company for an increase in its electricity rate.[6] In this instance very severe competition between a number of producers had led to the consolidation of the rivals into the Northern California Power Company. The new corporation then requested an increase in rates, on the ground that the existing schedules were unreasonably low. Mr. Eshleman condemned such practices and said that the California Railroad Commission would not countenance the like in territory under its jurisdiction and requested the municipalities to follow a similar course.[7] To assist in enforcing this stand the commissioner announced that it would be the practice to adopt the scale of rates established under competition as reasonable to be imposed in non-competitive territory.

Moreover, if a utility, under ordinary circumstances were to go *below* the rates of its competitor it could not plead that it was forced to do so.[8] The Commission stated that companies would not be permitted to force down rates in order to kill off competition and then ask immunity from the consequences of their action on the ground that they were compelled to make low rates.[9] But, where utilities were *forced* by circumstances of competition to accord low rates in order to secure business, these rates could not be used as a measure of reasonableness. For example, Commissioner Edgerton did not consider the comparison of rates on cotton from Texas, Oklahoma, and Gulf points to Pacific Coast ports with those from the Imperial Valley to the same ports a fair one, because of the fact that the rates from the Gulf region were water-compelled.[10]

The apparent inconsistency between these two statements of the Commission can be explained by stating that if a company is forced by a rival to establish rates as low as the latter's rates in order to secure business, then the authorities will not take the rates granted by this company under such conditions as a measure of reasonableness for the rates of that same company in non-competitive territory.

However, where a company grants rates below those of its rival, then these may be regarded as voluntary. Such being the case they can be considered compensatory and hence may be used as a measure of the reasonableness of the charges of the same firm in non-competi-

6 1 C. R. C. 315.

7 The difficulties of having two regulating authorities, state and local, were eliminated in 1914 when the Railroad Commission was given complete control over all rates of utilities owned by private companies.

8 2 C. R. C. 41, *Julius Hayman Company vs. Southern Pacific Company.*

9 *Ibid.*, 42.

10 3 C. R. C. 1155, *Chappell vs. Southern Pacific.* See also 6 C. R. C. 293, 304.

tive territory Thus, the distinction between voluntary and competitive rates becomes important when the regulatory body is deciding whether or not rates in a competitive territory shall be used as a standard of reasonableness

The same remarks apply to interstate commerce The Mann-Elkins Act of 1910 aimed at the prevention of granting low rates merely to kill off competition and then raising charges afterwards to make up for the losses incurred. It was provided that, whenever a railroad reduced its freight rates in competition with a water route, it might not increase these rates unless the Commission found that the proposed increase rested upon changed conditions other than the elimination of water competition [11]

These provisions of the law, however, have in practice proved a negligible quantity [12] For example, transcontinental commodity rates were made to meet the competition of the Panama canal when it opened. When slides closed the canal in 1915 the carriers were ordered to restore all transcontinental rates in harmony with the distance theory, since water competition was considered a negligible factor. In 1922 the railroads again applied for relief because of the Panama canal but this time the application was denied because of the Act of 1920 which stipulated that all rates must be reasonably compensatory, and that no rates were to be so low as to threaten the extinction of legitimate competition by water carriers.[13]

Competition which leads to an unnecessary duplication of facilities has been put in the same category as over-investment. In neither

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[11] Jones, Eliot, *op cit.* 256 Also see 4(2) Interstate Commerce Act.

[12] Daggett points out that the courts and the Commission have failed to enforce this clause on at least three separate grounds: (1) The Interstate Commerce Commission has pointed out that the primary purpose of the law itself is to encourage water competition Hence encouragement should be given the carriers to raise their rates at competitive points rather than to continue them at a level which makes the competition of boat lines impossible (2) The Interstate Commerce Commission has also held that rail carriers are not only not *required*, but that they are *forbidden to continue low rates to points which once enjoyed water competition*, when the water competition has ceased, unless, indeed, they reduce their rates to other points so as to preserve a proper relationship The continuance of low rates under such conditions would produce a discrimination which the Act to Regulate Commerce makes unlawful. (3) The United States Supreme Court has ruled that carriers which quote lower rates to water competitive points than to intermediate destinations with the approval of the Commission, may subsequently raise these rates when water competition disappears, in spite of section 4(2), because the law does not apply to reductions made under the Commission's authority. (*See Skinner and Eddy Corporation vs. U.S.*, 249 U.S. 557)—Daggett, *ibid.*:656.

Finally it should be noted that the Act of 1920 gave the Interstate Commerce Commission the power to fix minimum railroad rates, and thus rendered the clause quite unnecessary.

[13] Jones, Eliot, *op. cit.*:178–182.

case will the California Railroad Commission prescribe rates that will give a fair return. This was the announcement made by Mr. Eshleman to the application of various carriers operating on the Sacramento and San Joaquin rivers for an increase in rates.[14]

In the opinion given, he stated that the San Joaquin situation was a clear example of the evils of competition resulting from the duplication of facilities; neither company had been able to secure enough traffic to make the business profitable. He held that the evils of both monopoly and competition existed there and that the public could not be expected to give a return upon facilities not necessary in the service of the public. The commissioner in rendering his decision stated that the evidence presented did not prove to him that any rate increase should be allowed, even on the basis of the property involved and the expenses shown. Consequently for lack of conclusive evidence he dismissed the case, but the *principle* involved in the decision was contained in the earlier statement.

We shall see, in the section on market competition, that the Commission has maintained that, although it could prevent discrimination, it could not compel utilities to grant rates lower than those which could be prescribed as just and reasonable in order to allow producers to meet market competition. At the same time it has *permitted* utilities to grant such rates when they have yielded something more than out-of-pocket costs and thus have not resulted in burdening other traffic

A similar stand has been taken in regard to the direct competition of Companies. The *Western Pacific Railroad Company, the Southern Pacific Company, the Atchison, Topeka and Santa Fe Railway Company* applied to the Railroad Commission for an order to abolish the rate of six cents per hundred pounds of grain and grain products from Stockton only, to San Francisco and to publish in lieu thereof a rate of seven and one-half cents per hundred pounds, intermediate in application.[15] The railroads claimed that the rate of six cents was a depressed one resulting from the charges established many years previous to meet water competition, but that the boat transportation companies had raised their rates until they were seven cents per hundred pounds; they also claimed that the six-cent rate was non-compensatory. A number of grain producers and grain buyers intervened and contended that a change in the freight rate would be reflected in the selling price of their grain. The Commission decided:

[14] 5 C. R. C. 361. [15] 26 C. R. C. 316.

It is the right of a carrier in its own interest to meet competitive conditions, but a shipper cannot demand that such competition be made the basis of rates not reasonably compensatory when the carrier in its own behalf does not choose to meet the competition existing in the territory involved. Water competition may be given by the carriers as a justification for rates that are lower than those otherwise reasonable under normal conditions and it is also a principle in rate-making that water-compelled rates, are not to be taken as a gauge for reasonable rail rates [16]

This made it clear, then, that a carrier might meet the direct competition of another if it wished, but the Commission had no power to compel the carrier to do so unless the rates called into question were proved unreasonable, *per se* If, however, rates were granted to one group of customers on the basis of competition and this action gave rise to discrimination or caused an undue burden on other traffic, then the Commission could cause the removal of such discrimination or burden

The difficulty of the relationship between the investment theory of rate-making and the competitive theory is also involved in this connection This was very clearly brought out in the case of *J. W. Freeman, et al, vs. Irwin Heights Water Company*,[17] Mr Thelen presiding. This case arose out of a series of complaints against the rates charged by four water companies serving various parts of Santa Monica. An examination of the situation showed that three of the companies were not receiving the return to which the commissioner considered them entitled, while the fourth was getting more than it was justly entitled to according to the standards of the Commission Obviously, it was necessary that all four companies maintain the same rate since they were competitive, yet the one rate of charge led to unequal, and in the opinion of Mr. Thelen, unjust rates of return. No way out was offered, in this instance, to the highly complex problem of an equitable rate level for competitive utilities of unequal strength. The Commission suggested that the ultimate solution was either consolidation of all of the corporations under a single private concern, or municipal ownership. This, of course, left untouched the ubiquitous riddle of weak versus strong utilities. The idea of recapturing earnings had not yet been brought forward, and indeed, it still remains outside the sphere of local utility regulation.[18]

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16 *Ibid.*:318-319.

17 7 C. R. C. 418. See also 7 C. R. C 423; 7 C. R. C. 428; 7 C. R. C. 431.

18 The dilemma facing the Commission is shown by a quotation from the opinion itself:

"If the rates in these cases are adjusted on the principles usually applied in the establishment of public utility rates, while these four companies remain

A similar situation was faced by Mr. Edgerton in *re*-Application to fix the rates for the service of gas to all of the consumers of the *Southern California Gas Company;* and *City of Los Angeles vs Southern California Gas Company and Los Angeles Gas and Electric Corporation.*[19] The applicant in this instance, namely, the Southern California Gas Company, alleged that its rates were unreasonably low The Commission in the opinion rendered in the case, dealt only with rates for the service of gas to consumers in the city of Los Angeles and vicinity.

In Los Angeles the applicant served gas in competition with Los Angeles Gas and Electric Corporation. Because of these competitive conditions Mr Edgerton stated that it would be impossible for the applicant to conduct its business with success if higher rates were fixed for its service than those which the same day had been fixed for the Los Angeles Corporation on an investment basis estimated to give a return of 8 per cent[20] Hence the rates of the two corporations were made the same. The charges thus established were not sufficient to yield the applicant an adequate return on its investment, but the commissioner recommended that, when it became necessary to establish a rate base, careful consideration should be made to the claim of the company for an allowance representing development cost. Thus, in this case the Commission did not allow a fair return to the weaker of the two competitors but intimated that at a future time

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in separate ownerships, a heterogenous and most unsatisfactory condition will result. While no definite conclusions have as yet been reached with reference to rates proper to be charged by each of these four companies, the investigations thus far conducted by this Commission tend to show that certain of these companies are not receiving the return to which they are entitled, while at least one of them is receiving a larger amount than that to which it is justly entitled, and must expect a reduction in case these proceedings are brought to a final termination. The result of such orders would be that some of these four companies serving in certain cases territory immediately contiguous to territory served by one or more of the other companies, would be charging rates either higher or lower than the rates charged by their neighbors. Prompted by a natural desire to receive water at the lowest rate, the customers of the company authorized to charge a higher rate would seek to secure water from the company directed to charge a lower rate, thereby still further weakening the business of the company or companies which are doing poor business, and still further strengthening the business of the company or companies which are doing the best business. It is unnecessary for me to pursue this subject further It must be perfectly obvious to any person who gives thought to this question that the only way properly to handle the water situation in Santa Monica is to regard the entire city as a whole and to have water supplied either by a single private corporation, serving the entire city or by the city itself under a municipally owned and operated system '' 7 C. R. C. 418, 422.

It was unnecessary for the Commission to decide the rate question at the time because Santa Monica instituted proceedings to acquire the property of the companies and run them itself.

[19] 13 C. R. C. 742. [20] 13 C. R. C. 724.

the rate base would have to be considered and then allowance would be made for this under the heading of development cost

It should be remembered that the rates of the Southern California Gas Company were, in this instance, being considered only for Los Angeles, and that Mr. Edgerton probably meant that these considerations should be kept in mind when the rate base of the whole company was being determined Under those circumstances it might be possible for the company to get a fair return for its business as a whole by making up in non-competitive territory what it lacked of a fair return in Los Angeles It is therefore evident that this case did not answer entirely the question of the relationship between the investment theory and the competitive theory where two companies are in competition in their entirety.

This situation, however, was faced in a decision rendered by Commissioner Rowell in a consolidation of proceedings concerning the rates charged by the *Great Western Power Company of California and associated companies*.[21] A thorough investigation was made as to the value of the plant of the Great Western Power used and useful in the public service. It was found that approximately 90 per cent of the gross electric revenue of this company was derived from territory in which service was rendered in competition with the Pacific Gas and Electric Company The rates of the latter had been fixed by the Commission on the investment basis and it was now considered impracticable for the Great Western Power Company to make higher charges where competition existed The rates which this company was thus forced to adopt, would, it was estimated, give a net return of about 7.2 per cent This return the Commission did not consider entirely adequate under the operating conditions at the time of the proceedings; yet, in spite of the unsatisfactory situation, the rate level was left as it was merely because a competitor, the Pacific Gas and Electric Co., could earn a fair return (about 8½ per cent in this case) on an estimated investment basis. The obvious inference to be drawn from this decision is that where utilities are competing in a common field the *maximum* rate that will be allowed is a "fair return on a fair investment" of the most efficient company

This conclusion is supported by a statement made by Commissioner Martin in another case involving the *Great Western Power Company:*

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[21] 22 C. R. C. 814.

> This Commission should, indeed, be slow to accept the service or the operations of any single utility as standards against which to measure the performance of all other utilities, but in the absence of convincing reasons we are clearly not justified in allowing to one utility rates higher than are necessary to adequately support the operations of a similar utility operating in the same territory under practically identical conditions.[22]

It is quite obvious, even where similar utilities are competitors under identical conditions, that there must be a difference in their returns owing to differences in managerial ability or other incidental factors. According to the above statement then, the most efficient will be taken as the gauge In defense of this position the authorities would probably urge that a fair return assumes efficient management; that the reward to the most efficient concern under these circumstances would be the highest return allowed; and that all the competitors could receive such by equaling the efficiency of the one taken as a standard.

It will be seen from this discussion that the situation arising from the method of regulation in California is slightly different from that under the Transportation Act of 1920. According to this act the Interstate Commerce Commission is required to prescribe rates which will give a fair return on the aggregate property of railways operating within a given area. This provision was an endeavor on the part of Congress to grapple with the weak-and-strong-road problem: to keep, that is, the strong roads from getting too high a return because of the necessity of keeping rates up in order to prevent the weak, yet necessary lines from going into bankruptcy.

It is apparent, however, that the two situations are decidedly similar. In each case some company is earning less than the reasonable return which, theoretically at least, is the amount the authorities consider necessary to induce capital to enter the field. Although, so far as the weak companies are concerned, neither the California Railroad Commission nor the Interstate Commerce Commission[23] is hampered, legally at least, yet neither has offered a method which will secure to weaker corporations, essential to the communities which they serve, an adequate or reasonable return. Wherever competition exists and is allowed to continue there will always be a difference in

[22] *J. W. Flannery, et al., vs. Great Western Power Company of California*, 23 C. R. C. 853, 857. This case involved a complaint against the rates for steam heating service charged by the defendant in San Francisco. The rates for the same service by the Pacific Gas and Electric Co. had been lowered, and the Commission compelled the defendant to lower its rates because of the competition of this company.

[23] See Dixon, F. H., *Railroads and Government*:234.

earning power, in California this will mean that all below the most efficient will get less than a reasonable return; in interstate commerce all below the average will do likewise. Incidentally, the difficulty is doubly aggravated by the fact that not only are the weaker concerns earning less than a reasonable return, but they are earning less than a return which is reasonable to the more efficient companies.

From the standpoint of public policy it seems desirable that competition should be eliminated, wherever practicable, by encouraging consolidation, or if legally possible, by compelling it. This, however, does not solve the problem in situations where it is not possible to eliminate competition. Where the latter is the case, sound policy dictates that an attempt should be made to allow the *necessary* utilities a fair return. The argument may be advanced that this would encourage inefficiency. It should be remembered, however, that the authorities have the power to decide what constitutes a necessary utility, and, in addition, their judgment as to efficiency of management may influence, within the limits of the law, the return allowed. We have seen how the California Commission has done this very thing.

The policy just suggested is not to be interpreted as meaning that every utility operating under competitive conditions should be given a fair return. Only the necessary utilities which render adequate service with reasonable efficiency should be safeguarded. A concern not measuring up to these standards would therefore have to meet the rates of what the authorities considered to be the "marginal" concern.

The preceding remarks apply, in California at least, to private corporations only. The rates charged to consumers by municipally owned utilities in California are not subject to the control of the Commission.[24] Consequently, where competition prevails between privately owned and municipally owned utilities, as for example, in Los Angeles and San Francisco, the Commission cannot see to it that a necessary private utility earns a fair return if the rates of the municipal competitor are such as to prevent it. Since municipal concerns are tax exempt, and since the rates charged do not legally have to give a fair return, the situation contains elements of difficulty. At the present time (1931) the Commission is powerless to act. Without venturing far into this controversial field one might hazard the opinion that the solution to this problem is to place all utilities under the control of the Commission. This body could then pursue a far-

[24] Art. XI, Sec. 19, Constitution of California; see also re-*Southern California Edison*, 21 C. R. C. 393.

sighted policy without being hampered by the actions of concerns outside of its control.[25]

There are two other distinct limitations on the powers of the California Commission to control rates and competition. The first limitation arises from legislation concerning automotive transportation. Where an auto stage or truck company operates exclusively within the limits of an incorporated city or town or of a city and county, provided such concern is not part of a street railroad corporation, the state authorities have no jurisdiction.[26] Consequently it is possible for local authorities to permit competition with a utility under the control of the Commission.

The second limitation of powers arises from the conflicting jurisdiction of the Interstate Commerce Commission. The expansion of the powers of the latter body, a familiar story to all students of regulation, has reduced materially the powers of the State Commission. The California Commission of course still has exclusive jurisdiction over purely intrastate matters, but in the case of railroads, for example, this amounts to little more than dealing with problems of local discrimination. Even then the decisions must not conflict with the policies of the federal authorities. This fact in turn restricts the discretion of the State Commission in regard to local transportation since most of the local carriers compete directly or indirectly with interstate carriers. The most important motor-bus companies have extensive interstate commerce, and some of them are even international in nature. As a result of this conflict of authority, the California body has been reduced, in fact, to a "public utility" commission.[27]

[25] The Supreme Court of California has ruled that the jurisdiction vested in the California Railroad Commission, either under the direct provisions of sections 22 and 23 of article XII of the state Constitution, or of statutes enacted by the legislature pursuant thereto, is restricted to the regulation of public utilities which are privately owned, and does not include the operations of utilities by public corporations. The Commission has no jurisdiction, for example, over a complaint that a municipality is operating an auto stage line outside the corporate limits of a city, without a certificate of public convenience and necessity (*Colman vs. Montebello*, 24 C. R. C. 930, 931). See *Pasadena vs Railroad Commission*, 183 Cal. 256 (1920).

[26] Statutes of California, C 213, sec. 1(*c*); Public Utilities Act, sec. 2(*h*), and sec. 2¼(*b*). Sec. 2(*h*) says: "The term 'street railroad corporation,' when used in this act, includes every corporation or person, their lessees, trustees, receivers or trustees appointed by any court whatsoever, owning, controlling, operating or managing any street railroad for compensation within this state, or owning, controlling, operating or managing as part of or in conjunction with such street railroad any automobile, jitney bus, stage or auto stage used in the business of transportation of persons or property for compensation over any public highway in this state between fixed termini or over a regular route."

[27] No serious conflict has yet arisen between the California and the federal authorities over the interstate activities of utilities. The emergence of such a

Market Competition

Market competition arises from the fact that customers of a transportation company compete with other people for the privilege of selling their commodities in the same market As a result, the company concerned often finds it necessary to grant special rates to the consumers of its service, who are engaged in this competition This necessity may arise from one or both of two causes, very often, if the company does not accord special rates it will not be able to secure the traffic; or the company may be desirous of building up an industry within its territory from which it hopes to derive considerable business at a later date Circumstances like these have had a very strong influence on freight rate structures both on this continent and in Europe [28] Railroads have also used their rates to assist certain centers in which they had a particular interest [29]

It is quite easy to see that, by following the principles enunciated above, transportation companies are able to exert great influence on the development of communities Such discretion in the hands of private corporations may be considered somewhat dangerous; at least it has been deemed wiser to place it in the hands of the legislative authorities or their delegates. Consequently, public utility commissions have from time to time been compelled to render decisions as to rates applying to conditions of market competition. This has usually taken the form of preventing unreasonable discrimination.

This point is illustrated by many decisions rendered in California, one of the earliest being that concerning the question of certain freight rates charged by the *Southern Pacific Company and the San Pedro, Los Angeles and Salt Lake Railroad Company* between Los Angeles and San Pedro.[30] The Board of Harbor Commissioners of Los Angeles called into question the reasonableness of certain freight rates of the defendant railroads on the branch lines between San Pedro and Los Angeles. Distributors located in San Pedro and in San Diego were competing for a market for business in Los Angeles. A lowering of

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difficulty, however, is obviously only a matter of time. The problem has arisen elsewhere. See *Eighth Annual Report* of the Federal Power Commission, 1928.

[28] See Ripley, W Z., *op. cit* , Acworth, W. M , *Elements of Railway Economics;* MacGibbon, D. A , *op. cit.*

[29] For example, one reason for the blanketing of transcontinental rates as far west as Missouri River points was the desire of the railroads to the west to build up the middle west centers See Jones, Eliot, *op. cit.*

[30] 1 C. R. C. 45, *Board of Harbor Commissioners vs. Southern Pacific Co., et al*

rates from San Pedro to Los Angeles, a distance of about twenty-four miles, would necessitate a corresponding lowering of rates from San Diego, a distance of about one hundred and twenty-six miles, if the rival interests located in this city were still to be able to compete with those in San Pedro. The Railroad Commission decided that market competition was perfectly legitimate if the granting of competitive rates did not cause discrimination. In view of the fact that the roads from San Pedro to Los Angeles carried an unusually large amount of traffic it seemed evident that lower rates should be charged there than on the longer distance of one hundred and twenty-six miles.[31]

The stand taken by the authorities in this case was that, while market competition must be an influential factor in rate-making, it does not seem that it should be allowed to work deliberate discrimination as between communities. Rather should it be used for the purpose of permitting various localities to utilize the natural advantages which they possess.

Some time later a somewhat different situation was presented in *Macey Leake, et al., vs Northwestern Pacific Railroad Company.* The complainants urged that the rates of the defendant on pine and rough oak-wood were unreasonable, unjust, and discriminatory, on the ground that rates on the same commodity carried by the Western Pacific from other producing areas were considerably lower.[32] This was a case of different wood-producing areas competing for the market around San Francisco Bay. The two railroads in question, namely, the Western Pacific and the Northwestern Pacific, did not serve the same territory so it was not a question of competition between these two companies for the same traffic Nor did the complainants urge

[31] "The distance from San Diego to Los Angeles over the Santa Fe Railway is one hundred and twenty-six miles, and the distance between San Pedro and Los Angeles over the Southern Pacific line is twenty-four miles, yet the rates for these two movements is today the same. It is urged that although the Santa Fe at the present time for this one hundred and twenty-six mile haul from San Diego to Los Angeles meets the rates of the Southern Pacific and Salt Lake from San Pedro and Los Angeles, yet should the rates be reduced from San Pedro to Los Angeles below their present amounts the Santa Fe will not meet such reduction, and ships instead of landing at San Diego would land at San Pedro. We sympathize with any community which, by reason of the practices which have been prevalent among railroads in the past, has relied upon the maintenance of unnatural conditions. No other railroad practice, in our belief, has wrought as much harm to the railroads themselves as the practice of attempting by an unduly preferential freight rate to afford a community advantages which its natural position does not afford, or by an unduly oppressive rate to deny some other community advantages which its natural position entitles it. We say that these practices have worked harm to the people in general, because they work an economic waste."—*Ibid.*:49.

[32] 5 C. R. C. 767.

that there was discrimination as between the rates on the defendant railroad itself The dissatisfaction arose out of the contention that they could not compete with producers on the Western Pacific. In other words, the complainants wanted the Commission to compel the defendants to accord them lower rates because of market competition

In his decision Mr. Loveland took the stand that the functions of the Commission were to prescribe just and reasonable rates for movement over the particular line of railroad involved, and, in so doing, it could not undertake to equalize market conditions. The only power the Commission possessed, he said, was to prevent discrimination which would arise, as between shippers, from the fact that the railroad itself voluntarily gave rates in order to enable some of its customers to meet market competition

This stand was re-affirmed in the decision on the complaint of a number of pottery works in South San Francisco, Oakland, and East Oakland against what were alleged to be discriminatory practices on the part of the Southern Pacific Company. In this instance the chambers of commerce of Oakland and San Francisco supported the complainants[33] The latter claimed that owing to market competition the rates charged them hindered them in their competition, in various places in California, with factories located at Lincoln, Ione, and Los Angeles It was argued by the complainants that, because of unfair carload-rate adjustments as between clay and clay products, the factories at Lincoln, Ione, and Los Angeles had an undue marketing advantage[34] Hence the Commission was asked to redress the

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[33] 6 C. R. C 582.

[34] As an example of this the complainants gave the following illustration:

"It is contended in this regard that the carload commodity rates on clay products do not bear a proper relation to the carload rates on clay from Lincoln and points on the Ione branch of the defendant to various points and that as a result the manufacturers at Lincoln and Ione have an undue advantage over the complainants in marketing their products This disadvantage and the resulting discrimination on the complainants urged is evidenced by the fact that the aggregate of the transportation charges on the clay shipped into their factories and on the manufactured products shipped thence to markets exceeds the carload rates on the clay products from the Lincoln factory to the same markets. It is said in this connection that due to a shrinkage of approximately 25% in the clay in the process of manufacture that it requires 2,666 pounds of that material to manufacture one ton of clay products, and at the present rate of 85c per ton on clay in carload lots from Lincoln or Ione the transportation expense on this amount of material to South San Francisco is $1.13 and as the carload rate on the finished product thence to San Francisco is 50c per ton, the aggregate transportation expense incident to the marketing of a ton of clay products in San Francisco is $1 63, whereas the manufacturer at the Lincoln factory is required to pay but $1 25 per ton for the service of transporting its manufactured products from its factory to the same market. It is contended therefore that the South San Francisco factory is at a rate disadvantage of 38c per ton on its manufactured products in the San Francisco market compared with the Lincoln Factory

grievance. The Commission decided that it was not empowered to equalize economic conditions of manufacture by rate adjustments, or to balance the transportation rates of shippers in localities not similarly located in regard to markets, or sources of supply of raw materials used in manufacture, in order to facilitate the competition of producers and manufacturers in marketing centers[35]

It can readily be seen that the attitude of the Commission in the cases discussed was that rates based upon market competition might be voluntarily established but they could not be compelled. When such rates have been put into effect, however, the regulatory body has then the right and the duty to prevent discrimination.

The very reverse of the above situation was presented in a series of proceedings involving the Southern Pacific Company, the Western Pacific Company, the Atchison, Topeka and Santa Fé, the Sacramento Northern, and the San Francisco-Sacramento, the question being the differential on cement produced in different areas but competing for a market in Sacramento.[36] The controversy arose out of the proposal of the Southern Pacific to grant reduced rates on cement to Sacramento and points north and east thereof, from plants at Davenport and San Juan which were situated south of San Francisco and about 175 miles from Sacramento. This was to enable these plants to compete more favorably with plants situated at Cement and Cowell, east of Sacramento about 58 miles on another line of the Southern Pacific. Thus the latter plants had the advantage of situation to the extent of about 118 miles. Under the existing rate schedule the differential as between the northern (Cement and Cowell) and southern (Davenport) groups was $1.50 per ton in favor of the shorter distance. The proposed rates would have reduced it to $1.00. The Pacific Portland Cement Company operating at Cement opposed the reduction in the differential and maintained that the rates it was paying then were too high. The latter company was not willing to sacrifice the advantage it held in regard to the large consuming territory of the Sacramento Valley. The Southern Pacific claimed that its rates from the northern mills were reasonable, and its proposed rates

due to the improper relationship existing between the present rates on clay and clay products.''

Ibid.:584. *Note.*—In the case of clay factories situated at Lincoln and Ione there was no necessity of transporting the clay since this material was obtained at these places. South San Francisco had to secure their clay for manufacturing purposes from a distance.

[35] *Ibid.*:585. See also *S. F. Chamber of Com. vs. S. P. Co.*, 11 C. R. C. 867.

[36] 23 C. R. C. 568, *Pacific Portland Cement Co. v. Southern Pacific Company.*

from the southern mills were less than reasonable, but necessary to make competition possible

In deciding the case the commissioner remarked·

> It is well recognized that a carrier may, in its own interest, publish rates lower than could be required of it by any regulatory body, but in so doing it is charged with the duty of seeing that the rates are not unduly discriminatory and cast no undue burden upon other commerce In other words assuming that the existing rates from the northern mills are reasonable, and they have not been shown to be otherwise, the proposed rates do not entirely reflect the difference in operating and other transportation conditions, between the two groups of mills [37]

A differential of $1.20 per ton was fixed as reflecting more nearly the difference in transportation costs At the same time it was thought that this would preserve to the northern mills their advantage of location, while still giving to the people of the Sacramento Valley the advantage of whatever competition was possible between two producing territories, when a difference of rates prevailed.[38]

Market competition may also cause carriers to grant special privileges to certain shippers in order to enable the latter to compete. The "Milling in transit" concession arises from this cause. This is given to permit the movement of raw material to, and of finished product from, the milling point under a total charge equal to the through charge on the finished product from the point of origin of the raw material to the point of consumption

The California Commission admitted the right of the carriers to make such rates in re *Albers Brothers Milling Company vs Southern Pacific Company, Atchison, Topeka and Santa Fé Railway Company, Northwestern Pacific Railroad Company, and Western Pacific Railroad Company.*[39] In this case the complainants called into question the milling-in-transit privileges extended to the shippers of grain products by rail carriers within the state of California on interstate business. Prior to the federal operation of railroads no milling-in-transit privileges had been granted on grain and grain products in California intrastate business. These concessions were made, however, after the war, and in addition the carriers granted voluntarily out-of-line-haul transit privileges to places like Stockton, South Vallejo, and Los Angeles.

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[37] *Ibid* ·574.

[38] The Interstate Commerce Commission has continually maintained that rates should always be such as to preserve to a place its natural advantages. See Hammond, M. B., *op. cit.*:291 f. See also *Pac. Portland Cement Co.,* 19 C R. C. 864.

[39] 20 C. R. C. 723. See also *Calif. Hawaiian M. Co vs. S. P. Co.,* 31 C. R. C. 559.

The Commission ruled that the carriers were within their rights in according these rates but that they could not show discrimination in so doing Consequently, it ordered the defendants to grant milling-in-transit privileges to all points reached by an out-of-line-haul of one hundred miles radius and to make reasonable charges for such a haul.[40]

The theory of the California Commission in regard to rates based on market competition is that they may be voluntarily accorded by carriers provided that these rates at least cover out-of-pocket costs, either directly or indirectly, that they do not overcome the advantages to which a community's location justly entitles it, and do not create discrimination as between individual consumers and producers. At the same time the authorities have steadily maintained that they cannot compel utilities to accord rates to their consumers which will enable the latter to engage in or continue competition;[41] but if rates are granted which are below what a rate-making body could prescribe as just and reasonable then the latter can compel an equal treatment of all consumers, thus preventing discrimination. This attitude has been consistently adhered to from 1911 down to the present day.[42]

The cases we have examined in regard to market competition have dealt purely with transportation companies. No decisions have been found in which other utility rates were fixed on the same basis. It is quite conceivable however that an electric or a gas corporation might desire to accord special power rates to a particular customer in order to assist him in competing with a rival in a common market, which rival has lower power charges than the competitor in question. Under these circumstances it seems safe to say that the Commission would allow special rates to be granted on conditions similar to those under which it has permitted special transportation rates.

The theory and practice of the California Commission in regard to competitive rates is quite in accord with that followed by other rate-making bodies. The Canadian Board of Railway Commissioners has held that authority to equalize geographic, climatic, or economic conditions is not granted by Canadian statutes; that it is in the discretion of the railway whether it shall so adjust its rates as to equalize

[40] For discussion of the development of this system of rate-making in interstate commerce see Ripley, W Z., *op cit* :402 f.

[41] See *Dailey vs. San Diego & A. Ry. Co.*, 27 C. R. C. 5; *Piedra Rock Co. vs. S. P. Co.*, 21 C. R. C. 895.

[42] See *Union Rock Co. vs. A. T. & S. Fé Ry. Co.*, 32 C. R. C. 288; *Union Rock Co. vs. S. P. Co. & P. E. Ry. Co.*, 32 C. R. C. 291; *Phelps Dodge Co. vs. Director-General*, 57 I. C. C. 714.

the effects of market competition, but when a railroad has voluntarily met such competition then the board can compel adjustments so as to prevent discrimination.[43] Similarly, the Wisconsin Commission has recognized the fact that wherever competition prevails traffic must be accepted at any rate which will at least cover the extra cost, but at the same time these charges must not cause discrimination [44]

The influence of market competition on the rate practices of railroads and on the decisions of the Interstate Commerce Commission has been so great that it has modified the whole rate structure of the United States. The huge and endless job which the federal body has faced has been the prevention of discrimination arising as a result [45] The Act of 1920 made it possible for the Interstate Commerce Commission to deny the carriers the right to grant rates to meet any sort of competition whatsoever if those rates were not of themselves "reasonably compensatory" Moreover, no rates proposed by railroads may give undue preference to any person, locality, or particular description of traffic

LONG AND SHORT HAUL PRINCIPLE AND TRANSPORTATION CHARGES

Since the prohibition of the violation of the long-and-short haul principle is embodied in the constitution of the state of California, therefore, from a constitutional as well as from a practical standpoint, distance is a factor which must be given careful consideration in determining either the reasonableness of a rate taken by itself or in its relation to other points. It is equally well established that distance alone is not the controlling factor. Conditions may arise which are in themselves sufficient reason for the Commission to allow the violation of the distance principle in the making of railroad rates.

The most important set of cases dealing with the application of the long-and-short haul provisions of the state Constitution and the violation thereof comprised those decided by Commissioner Loveland on June 19, 1916. In these cases the whole situation was dealt with most thoroughly and they set the precedent for the attitude of the California body.[46]

43 McGibbon, D. A., *op. cit* :156–161.

44 Holmes, F. L., *op. cit.*:135.

45 See Ripley, W. Z., *op. cit.*

46 Re-*Application of the Southern Pacific Company* for themselves and on behalf of carriers parties to Tariff Bureau, for relief from the Long and Short haul provisions of Section 21, Article XII of the Constitution of California, and Section 24(*a*) of the Public Utilities Act, relating to Intermediate Class Rates

The applicants asked permission to continue the violations of the Constitution and the Public Utilities Act which their tariffs contained. As we have already seen the Railroad Commission has the power to determine the facts of each case and to decide whether such violations are to be permitted or not. Mr. Loveland maintained that it was the duty of the Commission to determine two things:

(1) the cases wherein discrimination might be permitted, and

(2) the extent of such discrimination.

In deciding the cases before him the Commissioner announced that his opinions were based largely on "the expediency of continuing a situation with respect to traffic conditions which is the result of endeavors upon the part of carriers to meet changed conditions in their own interest as well as the sometime divergent views of shippers."[47]

Violations of the long and short haul principle were allowed for six distinct reasons:

1. *Water competition*—

The evidence showed that water competition was a very influential factor in rate-making in California and that a highly irregular system of rates had been the result. The four principal regions in which there was water competition in California were: the Pacific Coast, San Francisco Bay, the Sacramento Valley, and the San Joaquin Valley. In all these regions navigation companies operated and railroads were compelled to meet the rates of their water competitors at all points affected by water competition. This necessitated the violation of the long-and-short haul principle, since it was quite impossible for the railroads to operate throughout their entire systems on water-compelled rates.

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in excess of rates to more distance points, 10 C. R. C. 354, case 214-A; Application of Atchison, Topeka and Santa Fe Railway Company, 10 C. R. C. 368, case 214-B; Application of California Navigation and Improvement Company, 10 C. R. C. 377, case 214-C; Application of California Transportation Company, 10 C. R. C. 382, case 214-D, Application of Southern Pacific Company for themselves and on behalf of carriers parties to Tariffs of the Pacific Freight Tariff Bureau for relief from the Long and Short haul provisions of Section 21 of Article XII of the Constitution of California, and Section 24(2) of the Public Utilities Act, relating to Intermediate Commodity Rates in excess of rates to more distant points, 10 C. R. C. 387, case 214-E; Application of Atchison, Topeka and Santa Fe Railway Company, 10 C. R. C. 396, case 214-F; Application of Western Pacific Railway Company for relief on both Intermediate, Class and Commodity Rates, 10 C. R. C. 403, case 214-G; Application of Northwestern Pacific Railroad for the relief on Intermediate Class or Commodity Rates, 10 C. R. C. 406, case 214-H; Application of Petaluma and Santa Rosa Railway Company for the relief on Intermediate Commodity Rates, 10 C. R. C. 412, case 214-I.

[47] 10 C. R. C. 354, 357.

It will not be necessary to discuss all the adjustments that were made by Mr. Loveland because of water competition; one or two examples will suffice.

The class rates maintained by the Southern Pacific Company from San Francisco, Oakland, and Richmond, all on San Francisco Bay, on the one hand, to Stockton on the San Joaquin River, a distance of 91 miles, on the other, were:

10	10	9	9	7	7	6	5¾	5½	5¼

The high intermediate point was Banta, a distance of 74 miles from San Francisco The corresponding rates to Banta were.

17	15	14	12	11	11	8	8	7¾	6

The railroad defended these rates on the ground that its low scale of rates between San Francisco and Stockton was the same as the rates published by the California Transportation Company and by the California Navigation and Improvement Company, both operating a line of boats from San Francisco Bay to Stockton. This necessitated also the blanketing of rates from San Francisco, Oakland, and Richmond to Stockton. Mr Loveland found that the boat lines operating on San Francisco Bay, the Sacramento, and the San Joaquin rivers, were able to control rates to Stockton and to contiguous points and he allowed the violations to continue.[48]

Another example may be found in the competition of the Pacific Coast Steamship Company, North Pacific Coast Steamship Company, Pacific Navigation Company, and other steamship lines and their rail connections operating between San Francisco, Los Angeles, and other points in southern California, through the port of San Pedro. The steamship lines published class rates to San Pedro and through class rates via rail and water to points in southern California. In this connection Mr. Loveland remarked:

> There can be no doubt from the evidence submitted that the water competition between San Francisco and San Pedro is both active and controlling and that the rail rates between the ports and points contiguous thereto have been established on a lower scale than they would otherwise have been were it not for the effect of this water competition[49]

2. *Potential water competition*—

Not only actual water competition, but also potential water competition have been allowed in excuse of violation of the distance principle

[48] *Ibid.*:363.
[49] *Ibid.*:360. See also *San Francisco Chamber of Commerce vs. Southern Pacific Company and McCloud River Railroad Company*, 11 C. R. C. 867.

in rate-making. Carriers have often been forced to accord low rates to meet water competition, which competition has subsequently disappeared. But so long as the water facilities remained the possibility of competition recurring was ever present if rates should be raised

The Northwestern Pacific Railroad Company had been according a joint rate of $1.00 per ton on carload cement from points on San Francisco Bay to Petaluma while the high intermediate point, Novato, was paying $1.30 per ton [50] The reason given for this violation was that the rate to Petaluma was first published to meet actual water competition. The boat-line service was subsequently abandoned but the competition was still potential at the time of the application. The Commission considered this sufficient reason for allowing the discrimination to remain and quoted decisions of the Interstate Commerce Commission as authority for a similar ruling.

It should be noticed at this point that the federal body abandoned this stand at a later date. In 1919 it reversed its previous attitude in the Memphis-Southwestern case by denying the right of the carrier to depart from the Fourth Section unless water competition actually set the depressed long-haul rates. This principle was embodied in the Act of 1920 which forbade the granting of Fourth Section relief because of "merely potential water competition."[51]

3. *Short haul*—

The Commission received a number of applications by the railroads for permission to violate the long-and-short haul clause in cases where the longer roads were compelled to meet the competition, at various points, of roads having a much shorter haul. For example, the class rates of the Southern Pacific Company from Los Angeles to Lindsay, a distance of 235 miles, were as follows:

70	60	49	44	40	40	28	21	18	14

The Atchison, Topeka and Santa Fé Railway Company also operated between the same points but its distance was 411 miles In order to secure traffic between the two cities it was compelled to adopt the charges of the company with the shorter haul. The high intermediate point of the Santa Fé was Kramer, 174 miles from Los Angeles, and the rates to it were:

78	66	56	50	44	44	33	28	23	19

[50] 10 C. R. C. 406.

[51] Vanderblue and Burgess, *Railroads: Rates, Service, Management*:165–166. See also *Murfreesboro Board of Trade vs. Louisville and Nashville Railroad Company*, 55 I. C. C. 648.

The Santa Fé was allowed to violate the distance principle in order to meet the competition of its short-line rival, on the theory that the short-line competition was the controlling factor.[52]

4. *Long haul—*

Just the reverse of this situation was shown in the *Application of the Petaluma and Santa Rosa Railway Company* for relief from the long-and-short haul provisions.[53] In this instance the applicant had filed tariffs charging higher rates to intermediate points, but asked to be excused from compliance with the law, although it was the short-haul carrier serving territory in competition with a carrier operating over a more circuitous route. The Commission stated that ordinarily it would declare that the short line meeting the rates of a long line at common points would have to make such rates at intermediate points.

An exception, however, was made for the Petaluma Railway. It was found that the latter was a short line of only 30 5 miles, in that distance it had some 45 freight stations; and it gave a very efficient and high-class service which was especially beneficial to the farmers. In addition, the Petaluma Railway was the weaker of the two lines and was solely dependent upon this small mileage for its entire earnings. Consequently, Mr. Loveland deemed it in the interest of public policy to allow the violations to remain.

5 *Higher expenses at intermediate points—*

The railroads offered water competition as one of their excuses for lower rates to some places than at intermediate points on the same line But some of the water competitors of these same railroads also asked to be excused from compliance with the distance principle in certain cases. This was the request embodied in the applications of the California Navigation and Improvement Company and the California Transportation Company for relief from the long-and-short haul provisions [54]

The California Navigation and Improvement Company maintained lower class-rates from San Francisco to Stockton than to intermediate points and defended this action on the grounds that the terminals furnished the bulk of the tonnage; the operation of the boats was more difficult, and the cost of operation greater at the intermediate points. The reason for the greater expense at the intermediate points

52 10 C. R. C. 368, 373.

53 10 C. R. C. 412.

54 10 C. R. C. 377, and 10 C R. C. 382.

was that the landings were more difficult to reach, many of them had no wharves, while others were located away from the direct routes of the boats.

Another reason given for the violation was that, beginning with 1892, competition between steamboat lines on the Sacramento and San Joaquin rivers had been very severe. The competition was for the bulk business of grain, flour, and milk stuffs between the terminal points of Stockton and San Francisco. Even while the application was pending "tramp" vessels had invaded the field during the heavy shipping season.[55] This competition had forced down the rates between the terminals but had not affected the intermediate charges. The Commission stated that these reasons were sufficient for the continuation of the violation of the long-and-short-haul clause.

6. *Market competition*—

Another cause for the violation of the long-and-short principle in rate-making is market competition. Producers situated in different localities but marketing their goods in common centers often find that transportation charges are the deciding factors in their competition. Under these circumstances transportation companies find it necessary to accord special rates to certain customers in order that the latter may be able to remain in business, and that the transportation agency may be able to secure the traffic.

This factor was emphasized by a number of companies concerned with the decisions we are discussing and they asked exemption from the long-and-short haul on that basis. For example, the Southern Pacific Company was accorded a non-intermediate rate from Floriston to Los Angeles and San Pedro of 27½ cents per one hundred pounds on paper-wrapping and tissue in carload-lots, to meet a rate of 17¾ cents per one hundred pounds accorded northern paper mills by water carriers from Portland, Oregon, to San Pedro, published by the San Francisco and Portland Steamship Company.[56] The Commission allowed this exception on the ground that carriers were permitted to meet market competition and quoted a number of Interstate Commerce Commission cases as precedents for the decision. In *Corporation Commission of New Mexico vs. the Atchison, Topeka and Santa Fé Railway et al.*, 34 I. C.C. 292–301 the federal body had stated:

[55] These did not operate on a regular schedule and therefore were not under the jurisdiction of the Commission.

[56] 10 C. R. C. 387.

Many, if not all, of the commodities purchased by the El Paso jobber or consumer at Kansas City, St Louis and Chicago, can be likewise purchased at New York and other points on the Atlantic seaboard from which the water-and-rail routes are available. This situation presents competition between carriers serving markets of production, which kind of competition, we held in the fourth section case sighted, may properly be a valid basis for fourth section relief [57]

Many other similar cases were decided on the same basis by Mr. Loveland

The widespread influence of market competition and its bearing on the long-and-short-haul problem was exemplified in re *Los Angeles Lumber Company vs. Southern Pacific Company.* The hearings were conducted jointly with the Interstate Commerce Commission.[58] The case arose from the complaint of the Los Angeles Products Company that carload rates on lumber products of the Southern Pacific Company from Westwood, California, Portland, Grant's Pass, Medford, and Klamath Falls, Oregon, and other named points; to Sacramento and certain other points in California were unjustly and unreasonably low as compared with the published rates from San Pedro to the same destinations

The complainant in this instance owned timber lands on the Queen Charlotte Islands. The lumber was cut there and sawn into cants; then it was sent to San Pedro where it was finally manufactured and shipped to various parts of the state of California. The competitors of the company were at the points named in the complaint The complainants presented an extensive cost study of the costs of moving lumber but the authorities decided that, although this was valuable, it could not be used as an accurate determining factor in an entire territory where blanketing of rates was necessary and where water competition had to be met.

A review of the history of the lumber rates showed they had been vitally influenced by the grouped and contiguous location of the producing mills, by competition of carriers by water, and by the rivalry between the Southern Pacific and the Western Pacific, which commenced upon the completion of the latter line in 1911. Besides leading to low rates, this also caused an extensive blanketing over great areas at the points of origin, and, in certain districts, to the points of destination. For example, the Southern Pacific had in effect, at the time of the complaint, an 11-cent rate to Sacramento blanketed from such diverse points as San Francisco, Marysville, and Placerville.

[57] *Ibid.*:399.

[58] 26 C. R. C. 217

The following was given by the Commissioner as illustrative of the general situation:

> As early as 1907 rates in violation of the long-and-short haul provisions of the state constitution were made from interior mills to southern California points. As illustrative, 32½ cents was published from Weed to Los Angeles with 39¾ cents from Weed to Bakersfield (an intermediate point) and these rates were blanketed from practically all northern California points, beginning at Placerville, Newcastle, Boca, Red Bluff, extending to the California-Oregon lines.[59]

The Commission found that the rates from San Pedro to points in the San Joaquin Valley and into territory south of Los Angeles lacked uniformity, and it adjusted the rates to a more reasonable and uniform scale, but refused to take the Sacramento and San Francisco adjustments as the basis for the changes because of the exception in those regions already noted. The authorities maintained that the competition under which the northern California mills were compelled to conduct their business was important in the blanketing of rates in that territory, and that these rates had to be continued in order not to bring about a disruption of blanket adjustments, which had been of long standing and were apparently satisfactory to producers and consumers alike in the territory affected.

It will be seen at once that the California authorities have granted long-and-short-haul relief for essentially the same reasons as the Interstate Commerce Commission. Competition has been the main factor, for without granting exceptional rates many of the carriers could not have secured a share of the competitive traffic. Both commissions have also maintained that the limiting rate is the actual cost of moving the traffic. In other words, every rate allowed and charged must of itself be "reasonably compensatory." No rates may be depressed by competition so low as to burden intermediate traffic.

[59] *Ibid.*:228.

CHAPTER VII

POTENTIAL COMPETITION AS A MEANS OF REGULATING UTILITY RATES

Introduction

Competition, we have seen, has had a very marked influence on public utility rate-making in California, especially in the transportation industry. The monopolistic nature, however, of utilities like water, gas, and light companies makes it desirable, as a rule, to prevent competition since it is generally possible to render service at a lower cost where only one corporation is in the field. Since this is so it is usually deemed advisable to prevent a duplication of facilities, either by the granting of an exclusive franchise or by refusing to give a certificate of public convenience and necessity to a new corporation desiring permission to serve. Potential competition always and ever stands as a threat, however, just as it does to a private monopoly no matter how strong the latter may be.

Potential Competition and Rates

Railroad and utility commissions have used the threat of potential competition as one of the means of keeping public service corporations under check Generally speaking, if one utility is in the field it may feel assured that it will be free from competition so long as it gives satisfactory service and adequately supplies consumers at reasonable rates. But if another corporation is able to guarantee that it can give service, markedly superior as to rates and efficiency, and if public convenience will be served by allowing the entry of another utility, then the second utility will be given permission to operate

The California Commission has taken the stand that, in order to maintain its monopoly of a field, a utility must give adequate service and reasonable rates at all times prior to the threat of competition. The willingness to improve service and rates coming after presentation of the application of a competitor is insufficient. This is in order to compel corporations which are under the supervision of the Commission to keep their eyes on the weather-cock, and continuously to maintain a high standard of service.

The first important case in which potential competition was definitely laid down as a principle for regulating rates was that of the *Pacific Gas and Electric Company vs. Great Western Power Company*.[1] This involved the question of granting a certificate of public convenience to the Great Western Power Co. in territory already supplied by the Pacific Gas and Electric Co. The Commission granted the certificate and at the same time discussed at length the problem of utility monopolies, and the use of potential competition as a means of controlling them. In interpreting the law concerning the granting of certificates of public convenience it said:

It certainly is true that where a territory is served by a utility which has pioneered in the field, and is rendering efficient and cheap service and is fulfilling adequately the duty, which as a public utility, it owes to the public, and the territory is so generally served that it may be said to have reached the point of saturation as regards the particular commodity in which such utility deals, then certainly the design of the law is that the utility shall be protected within such field; but when anyone of these conditions is lacking, the public convenience may often be served by allowing competition to come in.[2]

Moreover, it was asserted that the utility must voluntarily accord to its patrons, before competition threatens, those things which are their due. The purpose of announcing this principle was, as already noted, to hold out to existing utilities the incentive to accord voluntarily to the people of California "those rates and that service to which they are justly entitled." The bait offered to new concerns was this: if they discovered that reasonable service and just rates were not being accorded, they could then enter the field.

It was also stated by the authorities, that a competitor would be allowed to enter only where it could adequately furnish service at a rate so much less than the rate which could be accorded by the existing utility, that the interests of the public would require the accommodation at a lower rate. Then the Commission continued:

We are aware that this may work hardships upon small companies, and we are likewise aware that the state owes a duty to the small utility which has gone into a field and furnished the inhabitants thereof with a service which would otherwise have been denied them. When the advent of the new utility, under such circumstances, will serve, through legitimate competition, to impair the investment of the existing utility, the difference in rates which may be legitimately accorded by the new utility must be so considerable that the public interest clearly demands the rendition of the service at the lower rate before the Commission will be moved to permit the competitor to enter such a field, provided always, as we have already said, that the existing utility, be it small or great, has been doing its best to treat its patrons fairly.[3]

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[1] 1 C. R. C. 203. [2] *Ibid.*: 209. [3] *Ibid.*: 211.

It was quite evident from this opinion that the guiding factor as far as the authorities were concerned was public interest. A utility was not at any time to be guaranteed exclusive possession of a field unless it was to the public interest to do so. As long, however, as the utility could demonstrate conclusively that it was superior to its prospective competitor and that its superiority was not the result of the appearance of the rival, then, and then only, would competition be prevented Later decisions rendered by the California authorities were to prove, however, that "adequate service at reasonable rates" was an elusive phrase, and hence protection from competition was rather rare.

An illustration of this point was given in re *Application of the Oro Electric Company* for a certificate of public convenience, which would allow it to operate in territory which was already being served by the Western States Gas and Electric Company[4] The Commission pointed out that it would protect utilities from competition wherever they were doing their full duty to the public, on the condition, however, that whenever public interest demanded competition, public interest must be considered paramount. The reason for this attitude, it was stated, was that, since utilities had been denied the right to the high returns they had been able to secure formerly, it was only fair to protect them from possible competition if they were doing their full duty. As a matter of fact protection was not given because of fairness, but rather because of public interest, since the authorities believed that a utility could give cheaper service under monopolistic conditions than under competitive ones, because there would be no unnecessary duplication of facilities under such circumstances, and the utility serving the area in question would be able to take advantage of larger-scale production. In this case, as well as in many others, the statement was made that, while a company would be protected from competition so long as it did its duty to the public, this was always subject to the qualification that where another utility could give the public as good or better service at rates materially less than those granted by the existing company, public interest would be deemed paramount and the new utility would be allowed to enter the field.[5]

[4] 2 C. R. C. 748 See also *Truckee River Power Co*, 32 C. R. C. 72; *United Parcel Service*, 32 C. R. C. 82, *Porteous vs. So. Cal Gas Co*, 32 C. R. C 696

[5] "The protection to the investment of a utility which is doing its full duty to the public is demanded, not merely as a matter of fairness, but also as a matter of common sense. If the utilities are to be held down to such a return which, while liberal, is not to be unreasonably high, and if, at the same time, the

The Commission came to the conclusion that the Western States Gas and Electric Co. was not rendering as good service as could be expected; also, it had been delinquent in making adjustments ordered in an earlier case. The Oro Gas and Electric Co. was given permission to enter part of the territory, the reason for the limitation being that the Western States company was in the midst of some reconstruction and it was decided that it would be unfair not to allow this to be completed Hence the defendant was given ninety days to bring its service up to standard. If this were not done the Oro Electric was to be granted its application *in toto* The Commission was particularly emphatic in reaffirming its stand in the Pacific Gas and Electric case and insisted that the modification in the case at bar was due merely to unusual circumstances.

In the same decision the opinion was also expressed that fear of competition had not had the effect on rates that it should have had. This belief was re-affirmed by Commissioner Eshleman in the case of the city of *San Jose vs. The Pacific Telephone and Telegraph Company*.[6] He agreed that a utility was a natural monopoly and such being the case it was to the interest of the public to prevent competition, but only on the condition that the service rendered was superior and the cost less than under conditions of competition. That he believed this had not been the case in California is clearly shown by a quotation from his decision:

> In very few cases has this Commission refused to permit competition to exist, and in those cases we are beginning to be presented with charges that the agency thus protected from competition is becoming arrogant and forgetful of the rights to the public Self-interest apparently makes the most potent appeal, and if the utilities are to be so short-sighted that they cannot see that self-interest requires as considerate and honest treatment of their patrons when there is no competition as is accorded when competition exists and in addition lower rates and better service, then some other method than regulation must be found to make them realize this fact. This results because the Commission is not and cannot be equipped with sufficient employees to watch every utility employee and scrutinize every utility practice in this State.[7]

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utilities are to continue to be subject to more or less fierce competition, people with money to invest will look to fields other than public utility enterprise for the investment of their funds. As the State of California is a young and growing state, with tremendous possibilities of development, and as it needs public utility enterprises to assist it in its growth, a wise public policy demands that utilities which are doing their full duty to the public should be treated with fairness and justness and liberality, and they shall receive such protection to their investments as they may deserve, subject always to the contingency that if another utility can, by reason of superior natural advantages or patented processes, or other means, give to the public a service as good as the existing utility, at rates materially less, the interest of the public must be deemed paramount and the new utility must be given an opportunity to serve the public.''—*Ibid.*:756.

[6] 4 C. R. C. 150. [7] *Ibid.*:152.

A case of considerable importance, since it involved the problem of how much protection from competition a utility is entitled to, dealt with the complaint of the *Coast Counties Gas and Electric Company vs the Sierra and San Francisco Power Company, and the Application of the Sierra and San Francisco Power Company* for a certificate of public convenience and necessity to serve Old Mission Portland Cement Company[8] The Old Mission Portland Cement Company had come into existence in 1914 as the result of a reorganization, and contracts were entered into by it and the Sierra and San Francisco Power Company whereby the latter agreed to furnish the former with power at comparatively low rates Up to October, 1916, the Coast Counties Gas and Electric Company had made no attempt to secure the business of the cement company nor did it possess the supply facilities that would enable it to carry the load necessary to furnish power. The Sierra Company, on the other hand, had agreed to give rates which would enable the cement company to compete with others in the central part of the State, and it also had the facilities to supply the power. The complainant alleged that the defendant was proceeding to construct an electric power line to serve the cement company contrary to a previous order of the Commission The defendant admitted this and filed an application for a certificate of public convenience permitting it to do so.

Mr. Devlin, the commissioner, stated that competition or the joint occupation of the same territory by two or more utilities of a similar character became objectionable when it resulted in unnecessary and unjustifiable duplication of investment and facilities because of the economic waste involved. If this were not the case, however, competition might, on the contrary, be beneficial In order adequately to supply the cement company it would have been necessary for the Coast Counties Company (the one in the field at the time of the proceedings) to make a large capital investment in new lines and equipment and in the rehabilitation of the existing lines. This would have resulted in duplication since the Sierra Company had available facilities close at hand, while if the Sierra Company were allowed to distribute electric energy generally in that portion of San Benito County served at that time by the Coast Counties Company a similar duplication and waste would exist. The commissioner maintained in principle the previous attitude of the Commission, that utilities are

[8] 12 C. R. C. 559.

entitled to protection, but not against the public interest. Hence he allowed the new company to enter on the following conditions:

> When viewed from a purely economic standpoint it must be at once apparent that there can be but one solution to the problem, and this solution demands that the present facilities of both utilities be utilized to their highest efficiency before additional investment is made in similar facilities to serve this territory. The economic situation here presented however, does not justify competition, but rather indicates a need for prompt and intelligent co-operation. Briefly, the Coast Counties Company is already occupying the field with apparently adequate and proper distribution facilities, and a reasonably efficient operating organization, but in order to serve an additional load of the magnitude of the cement plant from its present source of power, it must make an additional large investment in transmission lines and equipment. The Sierra Company, on the other hand, has no distributing system in San Benito County, but possesses transmission capacity, readily and economically available, amply sufficient to provide the energy required by the cement company in addition to all other requirements Obviously, from this point of view the interest of the public requires either that the Sierra Company be permitted to supply the cement plant directly, limiting its activity to the service required by this particular consumer, or that Coast Counties Company supply the cement plant and in so doing utilize the existing transmission facilities of the Sierra Company.[9]

The latter suggestion was adopted in the order of the Commission, thus preserving the monopoly of the Coast Counties Company in the territory served by it

Protection from competition—

The California Commission in the case of the *Pacific Gas and Electric Company vs. the Great Western Power Company of California*[10] summarized thoroughly its answer to the question:

> Under what conditions will the Railroad Commission protect a utility which is rendering service in a given territory, from competition with other utilities seeking to render a like service in the same territory?

It quoted the *Pacific Gas and Electric Company vs. Great Western Power Company*, 1 C. R. C. 203, previously discussed, as a precedent and laid down *four* conditions which must exist before a utility is entitled to protection from competition:

(1) The territory must be served by a utility which has pioneered in the field.

(2) The utility must be rendering efficient and cheap service.

(3) The territory must be so generally served that it may be said to have reached the point of saturation as regards the particular

[9] *Ibid.*:575–576. [10] 20 C. R. C. 744.

commodity in which the utility deals. In interpreting this condition the Commission said that Section 50 of the Public Utilities Act allowed a utility to serve a territory without a certificate if such territory was contiguous to its lines, and if it had not theretofore been served by another utility of like character. It also stated that, whenever the coming of a new utility into a territory would serve to develop such territory and build it up, either industrially or agriculturally, and thereby enhance the general prosperity of the State, such utility would not be excluded; in other words, competition would not be stifled unless such competition actually resulted in harmful duplication and economic waste.

(4) The utility must be fulfilling adequately the duty, which, as a public utility, it owes to the public

It is quite apparent from the statement of these four conditions that exclusion of competition by the Commission simply means that a company will be allowed to retain its monopoly just so long as it is giving the public the best service which the public can obtain. If another utility can come along and give similar service at a materially lower cost then it will be allowed to do so Thus, this guaranty does not amount to very much since it gives a smaller or weaker company practically no protection from a stronger, while if a strong company is already in the field it has very little to fear from a weaker competitor who seeks to enter. Of course, it does prevent ruthless rate wars to decide which is the stronger company. It also acts as a check against temporary price-cutting, since the new utility must demonstrate conclusively to the authorities that it will be able to keep its promises. The only thing that will actually prevent competion, however, is the ability of the utility already in the field, at least to equal the prices and services offered by its rival The fact that the utility during the period when it had the field all to itself charged only those rates which were reasonable according to the standards of the regulatory authorities and hence gave lower rates than the public might otherwise have received, cuts no figure at all if the rival can offer material advantages to the public The theory apparently is that the utility should jealously guard the public interest when competition does not threaten in order to ward off competition, and then take care of itself the best it can if a more favored rival enters.

The attitude of the Wisconsin Commission in contrast to the California body is interesting and instructive. In Wisconsin the authorities are empowered to admit a competing utility at any time

if public convenience and necessity require such competition. The purpose of these provisions is to enforce good behavior. Yet Holmes asserts that in no instance has it been necessary for the Commission to grant permission for another utility to compete Competition is not desired in Wisconsin and "the law robs the monopoly of the power to charge other than just rates."[11] It must be remembered that by utilities, Holmes means light, telephone, water, heating, and telegraph companies Thus it appears that the Wisconsin Commission has allowed each of the corporations supplying these services to have the exclusive privilege, in the territory served by it, for its particular product.

While the policy of the California Commission seems to be in distinct contrast to this, yet the principle underlying the practice of the two commissions is the same, namely, that competition shall be prevented so long as public interest is best served by so doing. It has been the experience over and over again in California that a second utility has been able to offer better terms to a district than the one already in the field has been able to do Under these conditions it would be foolish to exclude the newcomer. The mere fact that a corporation is getting only a fair return on a reasonable investment means very little, for a fair return to one company may mean high rates compared with those of another concern which is also earning a fair return. The public wants and has a right to receive service at the lower rates; if one utility cannot meet this requirement so well as another, the former must give way Under these circumstances it would seem wise to encourage consolidation, thereby eliminating the problems arising from competition.

The use of potential competition as a punitive measure seems to be open to criticism. The necessity of admitting a competitive utility in order to control the rates of the concern already in the field is a confession of the failure of the regulatory policy. If the existing utility, upon the threat of competition, can demonstrate conclusively that it can, and will, give better service than its potential rival, then it would seem to be wise for the authorities to refuse to admit the latter concern. To do otherwise would raise the problem of competition, and probably not accomplish the desired results. It might even be possible to extract a *quid pro quo* from the recalcitrant concern in return for the favor of allowing it to retain its monopoly.

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[11] Holmes, F. L., *op. cit.*:231.

CHAPTER VIII

COMPARATIVE RATES

Introduction

In deciding upon the reasonableness of particular rates, regulating bodies often make use of a comparison of the charges questioned and the conditions under which they are imposed, with other charges for similar services rendered under similar circumstances and conditions. These comparisons are of use in deciding questions both of simple unreasonableness and of discrimination. Moreover, they may be applied to the rate scales of a particular utility or to schedules as between various utilities. In the latter case these comparisons may serve as a gauge of the relative efficiencies of different companies which are not in competition with each other

It must be remembered, of course, that such rate-making does not pass upon the absolute reasonableness of the charges made That is to say, the equity of the general level of rates can never be decided on the comparative theory for there must be a standard determined on some independent basis. But it is the relation of these prices to each other that is of chief importance, and, since so many complicating factors enter into their making, comparison forms one valuable means of judging their relative reasonableness Furthermore, this is practically the only ground on which complainants can base their attacks since they seldom possess the statistics necessary to contest them on any other theory.

Voluntary Rates

Voluntary rates establish a standard, voluntarily acceded to by the companies themselves, which may be used as a gauge by commissions on the legitimate assumption that these rates are reasonable and just to the companies in question. Hence they may be applied elsewhere with due consideration of the circumstances and conditions involved. If the voluntary rates are of themselves reasonable to the utility, then other rates of the same company should be in line with these, provided that the circumstances of each case are carefully

appraised. If the other rates are not in line, then the receivers of service at the latter charges are being discriminated against On the other hand, if the rates accorded by the utility of its own free will are not reasonable as to the utility itself, then the services bearing the other charges are being unduly burdened. In either case the presumption stands against the company.

Very early in its history the Railroad Commission of California took the stand that rates voluntarily established by utilities were in themselves reasonable as to the utilities, and could therefore be taken as standards by the regulatory body for charges for services rendered under similar circumstances and conditions. In the case concerning the freight rates between stations in Los Angeles and Los Angeles Harbor, previously discussed, the commissioners said:

> . . . . we are forced to conclude that the rates which they have thus voluntarily put into effect in other portions of the state in some cases over similar hauls, and in many cases over more difficult hauls, and in almost all cases in territories where much less traffic is moving, are in themselves reasonable; and if we entertain this presumption we are driven to conclude that the rates for this traffic under the specially favorable circumstances surrounding it are excessive and unreasonable.[1]

The position taken by the Commission in this instance was that the rates voluntarily accorded in other parts of the State where the circumstances of transportation were much less favorable, were either preferential or unreasonable; preferential because they afforded services to certain localities at prices lower as compared to those in effect between Los Angeles and Los Angeles Harbor, than conditions warranted; or unreasonable in that they were not carrying their due share of the total burden of the companies if those between Los Angeles and Los Angeles Harbor were themselves reasonable. In either case the presumption stood against the railroads involved. Since rates voluntarily accorded to the larger part of the territory served were hardly likely to be unreasonable as to the railroads themselves the former presumption was accepted by the commissioners and the rates in question were lowered.

In the case of the *Pacific Gas and Electric vs. the Great Western Power Company* the Commission announced its intention of using the theory of comparative rates for a twofold purpose: (1) to prevent rate wars; (2) to assist in deciding upon the reasonableness of rates. The Pacific Gas and Electric Co. had complained that the Great Western Power Co. was encroaching upon territory served by the

[1] 1 C. R. C. 45, 51, *supra*, chap. 6.

former without due authorization from the Commission, in addition it petitioned that such authorization be not granted[2] Although the authorities allowed the Great Western Power to enter into competition with the Pacific Gas and Electric, yet they definitely stated that they would not allow rate wars in territory under the Commission's jurisdiction. They realized, however, that they were helpless to prevent them in cities that retained regulatory powers.[3] Neverthless, the commissioners announced their intention of curbing rate wars as much as possible, and of preventing utilities from making higher charges in non-competitive territory as a means of recovering losses incurred in such struggles The theory of comparative rates was to be applied for this purpose by adopting, as the standard, rates used in rate wars in territory under the jurisdiction of the Commission.

> To the utilities we suggest that should they enter into a rate contest in these cities, this Commission may feel inclined to take as the standard of reasonableness *for rates in territory within our control, the standard voluntarily put in by these* utilities within the territory over which we have no control and that the Commission will take their attitude in such cases into consideration on subsequent applications by such companies to this Commission.[4]

The stand here as in other cases was that the mere fact that a utility accorded certain rates of its own free will proved the *prima facie* reasonableness of those rates to that utility.[5]

Exactly the same attitude was taken by the Commission in the important decision previously discussed, concerning the application of the *Southern Pacific Company* to raise its transbay commuting rates.[6] The charges then in force between San Francisco and Bay points had been voluntarily established by the company but an increase was now asked for, one of the grounds being that the present rates did not give a return equal to the current rate of interest, and that the charges were therefore confiscatory.[7] The authorities maintained that the confiscation which they should take most notice of was "the confiscation of tremendous values in the property of the residents of Alameda County," which would result if the application were acceded to Then they proceeded to say:

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[2] 1 C. R. C. 203; see *Santa Maria Gas Co*, 20 C. R. C. 1066.

[3] *Ibid.*:216. This condition was changed in 1914 when the Railroad Commission was given the supervision of all public utility rates in California except those of municipally owned utilities.

[4] *Ibid.*:216, italics mine.

[5] *California Traction Company vs Atchison, Topeka and Santa Fé Company,* 1 C. R. C. 629. See *Home T. & T. Co. of Santa Barbara vs. Pac. Tel. & Tel. Co.,* 6 C. R C. 124, 130; *So. Counties Gas Co.*, 7 C. R. C. 37.

[6] 5 C. R. C. 555, *supra*, chap. 4. [7] *Ibid.*:673

When through a long period of years a transportation company has voluntarily accorded a rate to a community on the faith of which large investments have been made, and when again the same agency has voluntarily and under no legal compulsion incurred great expenditures and largely extended its facilities, the prima facie reasonableness which attaches to voluntarily accorded rates becomes, if not conclusive very strongly persuasive upon any regulatory authority.[8]

The theory underlying this decision was that rates that the company had voluntarily accorded for a period of years must have been reasonable as to itself. This being the case, these rates could be taken as fair so far as the company was concerned, since a comparison of traffic conditions, operating expenses, and operating revenues at the time of the inquiry with those at the time the rates voluntarily accorded were in effect, showed no reason why the transbay charges should be raised.

The theory of comparative rates, voluntarily established, has also been used to gauge the reasonableness of rates in various communities served by one utility. A good illustration of this was afforded in *City of Whittier vs. Southern Counties Gas Company of California.*[9] In this instance the city of Whittier complained against the charges of the Southern Counties Gas Company on the ground that the charge of $1.20 per thousand cubic feet of gas was in excess of a just and equitable rate. The complaint was based on the fact that similar communities were receiving similar service from the same company, in most instances at 75 cents per thousand cubic feet, and in only one at $1.10.

The Commission first of all discussed the investment theory and came to the conclusion that, at the rates then existing in Whittier, the company would receive a return probably slightly in excess of 8 per cent. The chief basis of the decision, however, was the theory of comparative rates, the standard of comparison being voluntary rates established elsewhere by the Southern Counties Company. The towns used in comparison were all of comparable size to Whittier, were served from the same gas field, they used essentially the same amount of gas, and in many cases required a larger transmission system than Whittier because they were farther from the field. Consequently it was decided that Whittier was not receiving fair treatment. The authorities said:

We must conclude from an analysis of the evidence in this case that the defendant has been and is discriminating against Whittier in the rates charged

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[8] *Ibid.*:574; *see A. T. & S. F. Ry. Co.*, 8 C. R. C. 322, 325.

[9] 14 C. R. C. 422.

for gas service. Such discrimination should be removed. Defendant has voluntarily put into effect in other communities rates lower than those charged in Whittier, and we must assume either that it is earning a fair return under those rates and can do the same in Whittier or that the defendant is willing to operate for a lower rate of return in the other municipalities than it desires the commission to allow in estimating the rate to be charged in Whittier.[10]

It might be urged in this case that since the Commission had not proved that the company was earning an excessive rate of return, a thorough investigation of the whole system should have been made and rates prescribed which would give a fair rate of return. It should be remembered, however, that the company had probably applied, voluntarily, rates which it calculated were the most profitable to it. Although no supporting evidence was submitted by either side, it is quite logical to assume that the demand was such that the rate applied by the company was the wisest under the circumstances. Quite possibly a higher rate would have resulted in lower returns, in the long run at least, and a retarded devolpment of the gas business. From this viewpoint, the attitude of the authorities seems logical, for it was natural for them to assume that the utility knew more about the demand situation in the territory which it served than did they.

The theory of voluntary rates as applied by the California Railroad Commission can obviously be made to serve two useful purposes. First of all, it can be used to prevent an abuse common to many utilities, especially railroads, namely, that of granting decidedly preferential rates to certain communities or customers, while at the same time making up the deficits thus incurred from others. Secondly, it may be used to save the authorities considerable work in investigating conditions where utilities wish to reduce certain charges, if they place upon the companies the burden of ascertaining whether such charges are reasonable as to the companies themselves, and if they announce that these will be applied to all services rendered under similar circumstances and conditions by the utility making such reductions. This imposes a minimum of restraint on private corporations and at the same time prevents undue discrimination and illogical rate schedules.

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10 *Ibid.*:429. See *B. & R etc Assn vs Anderson*, 32 C. R C 54, 60; *Pomona Valley Tel. & Tel. Union*, 30 C. R. C 606.

Comparison of Rates Where Services Are Similar but Rendered by Different Utilities

In the majority of cases coming before the California Commission where the customers have attacked the unreasonableness of the rates in question, the complaints have been based almost entirely upon comparisons of charges for similar services by other utilities As one attorney expressed it:

> . . . it is practically impossible for complaining parties to prove that a rate is unreasonable on any other than the comparative basis because all details of the cost of operation, earnings from a particular class on traffic and kindred items are in the hands of the defendant carrier and inaccessible to complainants.[11]

In a very large number of instances complaints against utilities arise from the fact that some consumers see that others are getting similar services in other communities for lower rates. Hence they register protests with the authorities the burden of which is that the rates accorded them are unreasonable as compared with charges of other companies.

The first case of this nature which the California Commission decided on a purely comparative basis dealt with the investigation of the joint rates submitted by the *Western Pacific Railway Company and the Nevada-California-Oregon Railway.*[12] The question at issue was not that of discrimination or relativity of rates, but rather the question of the general reasonableness of the charges of the defendants. A comparison of the rates which the Western Pacific wished to make with charges of other roads for similar service was quite favorable to the former; in addition to that, the railroad had benefited the communities it served very materially by giving them lower rates than they were enjoying when it commenced to serve that territory.

At that time the authorities were without any kind of cost statistics whatsoever, so comparison was their only guide. In rendering their decision they said:

> While not agreeing that the comparisons are in all respects fair ones, yet they reasonably illustrate the fact that, even in those comparatively few instances where the Western Pacific desires to increase its rates, it at least is not asking more than other roads ask for a similar service, and until we are in a position to say that the other roads are charging too much or we have considered the value of the property of the Western Pacific and its total traffic, we cannot go behind those figures.[13]

Hence the Commission allowed the increase requested.

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[11] *San Mateo Development Assn. vs. S. P. Co*, 6 C. R. C. 853, 864.

[12] 1 C. R. C. 1.

[13] *Ibid.*:8; see also *S. P. Co.*, 2 C R. C. 258; *Flora Water Co.*, 19 C. R. C. 725.

The comparison of rates of one corporation with those of another may be used also, to assist in determining the reasonableness of charges when a fair return cannot be obtained. This was the case in the *Application of the San Diego and Southeastern Railway Company* for an order authorizing certain increases in passenger fares and freight rates[14]

The Commission made a thoroughgoing study of the finances of the company and found that the investment theory was quite inapplicable under the circumstances. The company, however, asked for an advance in certain rates in order to prevent an estimated deficit of $86,287.21 for the year 1916. Although the concern was very conservatively financed and apparently efficiently operated it was impossible to get a fair return on a reasonable valuation as set forth by the Commission.

Vigorous protests were registered by interveners against the increases in freight rates and passenger fares proposed by the company. They maintained that the law did not permit utilities to charge rates which were "up to the maximum the consumer can pay." (*Smyth vs. Ames*, 169 U. S. 464, 547); all that could be charged was what the service rendered by it was reasonably worth To assist it in deciding on a fair price for the service, the Commission compared the rates proposed by applicant with those charged for equal distances on the same commodities by the Atchison, Topeka and Santa Fé Railway between points in southern California. The comparisons all favored the applicant. Moreover, the earnings per train mile of the Santa Fe were much superior. Mr. Loveland, the commissioner, decided that a comparison of rates on the principal commodities moving over the lines of the applicant showed that the existing rates were less than those charged by other roads for like shipments moving an equal distance, and though comparisons were not a criterion of the justness or unjustness of a rate, the increases asked for in the case in question were justified and should be granted.

The use of rate comparisons in deciding questions of reasonableness and discrimination has been given wide recognition by the California Commission and these comparisons when properly made, are, in its opinion, "entitled to much consideration." The way in which these may be used was illustrated in *Richfield Oil Company vs. Sunset Railway Company*.[15] The complainant protested that the local rates of the defendant on carload shipments of crude oil were unreasonable

[14] 8 C. R. C. 714; see chap. 5 for a fuller discussion.
[15] 23 C. R. C. 722.

and presented as evidence the charges of other companies for similar shipments over comparable distances elsewhere in the southern part of California. The complainant also charged that it was suffering severe losses in business, which losses were directly traceable to the higher freight rates it was paying No figures were exhibited in regard to the cost of traffic movement by either party but the complainant presented carefully prepared statistics, showing rates on fuel oil at different points in California, the earnings per ton mile, per car, and per car mile, and also statistics showing rates and earnings on other commodities The complainant also showed that the railway operating income had declined very rapidly since the railway had raised its rates The authorities concluded that:

The evidence shows clearly that the movement of this fuel oil is regular and in heavy volume; that the service is rendered under most favorable operating conditions, entirely free from train interference, that in most instances the carriers receive a second haul and sometimes a third haul, and that the rates assailed are in excess of the rates for comparable service at other points in the same general territory.[16]

Hence an order was issued for the railway to file a new schedule of rates on crude oil, in line with similar rates in the same general territory.[17]

Although comparisons are valuable, the authorities have been compelled continuously to point out the fact that, in order to be valid, these comparisons must show similar circumstances and conditions, and must be supported by ample evidence. Complainants are too prone to attack rate schedules on a superficial analysis of a few items chosen from the tariffs. A discussion of one example will suffice. In re-*Fares for Transportation of Passengers* between points on the southern division of Northwestern Pacific Railroad[18] the complainants charged that the fares between San Francisco and points reached by the electric lines of the defendant were unreasonable as compared with fares between San Francisco and other suburban points served by other lines

In its opinion, the Commission showed that the Southern Pacific serving Alameda on the east side of San Francisco Bay had voluntarily accorded low rates in order to build up traffic, and that the Northwestern Pacific could not be compelled to make the same experi-

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[16] *Ibid.*: 776, citing *Royster Oyster Co. vs. A. C. L. R. R.*, 50 I. C. C. 34.

[17] For similar cases see: *Hunt Bros. Packing Co. vs S P. Co*, 2 C. R. C. 349; *Pacific Rice Growers Assoc. vs. A. T. & S. F. Ry.*, 19 C. R C. 248; *Piedra Rock Co. vs. S. P. Co.*, 22 C. R. C. 327.

[18] 2 C. R. C. 910.

ment in serving Marin County on the north and west side of the bay. There was no proof that similar results would be obtained by the Northwestern Pacific as had been obtained by the Southern Pacific. Moreover, transportation to Alameda County by ferry and rail was between thickly settled communities where the flow of traffic was quite regular. The traffic to Marin County, on the other hand, was irregular, less in volume, and involved a longer ferry service, the latter being much the more expensive of the two types of transportation, namely, ferry and electric trains, required in connection with the passenger traffic. Consequently the authorities did not consider that the defendant should be required to give the same rates as the Southern Pacific and so allowed the existing schedule to stand.[19]

Finally, it should be noted that while the rates charged by one utility may be compared with those of another in order to gauge the reasonableness of the rates of the former, yet as a general rule such an approach is of value only where competitive factors are of vital importance or where other tests fail. Even then comparison is only one yardstick, although often a very useful one The mere fact that utility rates in one locality are higher than those in another which is served by a different company, cannot compel a reduction of rates of the former even if circumstances and conditions are essentially similar, since, by constitutional law, every concern is entitled to a fair return. Such evidence is of no probative force whatsoever.[20]

Comparative Theory as Used in Adjusting Transportation Rates on the Same Commodities Moving under Similar Conditions

The comparative theory of rate-making may also be used to decide questions of discrimination between shippers of the same commodity or commodities on the same railroad. In the cases which we have selected as illustrating discrimination or alleged discrimination, complaints arose because certain customers were not being accorded the

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[19] See 3 C R. C. 5 for a similar case in connection with the Peninsula Railway Company. See also *Long vs. S P. Co.*, 1 C. R C 913 (citing *I. C. C vs. Chicago G. W. Ry. Co.*, 141 Fed. 1003); *Rosenwold & Kahn vs S. P. Co*, 2 C R C. 860; *S. F. Chamber of Com. vs. S. P. Co.*, 11 C. R. C. 867, *Jacobs vs. Berkeley Trans. Co.*, 25 C. R. C. 18; *Lavensaler vs. Kuppinger*, 29 C. R. C. 77; *Albers Bros. Milling Co.*, 30 C. R. C. 866; *Sperry Flour Co vs Island Transportation Co*, 30 C. R. C. 561.

[20] Comparison of gas rates with rates charged elsewhere in cities of the same character are in no measure a guide to either the reasonableness of the rates or to the value of the service and are not in any sense conclusive evidence on these points—*Cuttle vs. Hanford G. & P. Co.*, 12 C. R. C. 241, 245.

rates to which they considered themselves entitled by virtue of the conditions surrounding the rendering of the services, while others were the recipients of advantages which, it was maintained, should have been shared by all alike.

If a transportation company is carrying various commodities which are comparable in type and value, under similar circumstances and conditions, then this may be considered prima facie evidence that the rates should be the same for each commodity. If two services are essentially the same in every respect, then the charge for one may, by comparison, be applied to the other. Again, it may be stated, this has nothing to do with the level of rates and does not question or affirm its reasonableness, it merely applies as between rates for the same company.

Legislatures and commissions have continually maintained that one price must be charged for one and the same service. Very few shippers, however, are served under identically the same circumstances and conditions and so it becomes necessary for the authorities to decide whether or not conditions are sufficiently similar to warrant the same rate.

In *Pioneer Box Company vs. Southern Pacific Company*[21] the question of discrimination was raised, the complainant charging that the defendant had discriminated against him as compared with other shippers. The applicant manufactured wooden boxes at Barnard, California, and the Southern Pacific hauled lumber from Sisson, a distance of one and three-tenths miles at 40 cents per ton, 15 tons minimum, to the box plant at Barnard. The railroad also transported lumber, at $3.00 per car, from Sisson to Upton, a distance of two and four-tenths miles, to competitors of the Pioneer Box Company.

The Commission maintained that the movements were under essentially similar circumstances and conditions with the advantage, if any, in favor of the Sisson to Barnard shipments. All the boxes manufactured by the companies moved south to destination and hence there was a back haul from Upton to Sisson while no such condition obtained at Barnard. Consequently the complaint was sustained and the discrimination removed.

The principle set forth in this early case was that, since the shipments moved under essentially similar circumstances and conditions, there was no excuse for charging different rates on the same com-

[21] 1 C. R. C. 568. See *Pac. Fibre and Retarder Co. vs. S. P. Co.*, 13 C. R. C. 61; *Albers Bros. Milling Co.*, 20 C. R. C. 1.

modities The railroad had urged that the difference in rates had grown out of past conditions but the Commission insisted that there was no excuse, at the time of the complaint, for the Pioneer Box Company paying a higher rate than its competitor.

The question whether an industry located upon a siding or spur, when the latter is operated by an individual carrier, is in the same position as one located on a line over which all carriers have the privilege of equal use; and whether a railroad is compelled to absorb the switching charge in the former case if it does in the latter, has been decided in the negative by the California Commission In re-*California Canneries Company vs. Southern Pacific Railroad Company, et al.*,[22] the complainants alleged discrimination on the part of the Southern Pacific Company and the Western Pacific Railway Company. These two companies refused to absorb the switching charge of $2.50 per car on non-competitive traffic assessed by the Atchison, Topeka and Santa Fe Railway Company to cover switching service performed between complainant's factory on the Santa Fé and the transfer track. The basis of the objection was that the California Fruit Growers' Association, located on the State Belt Railroad, paid no switching, regardless of the point of origin or destination of shipments, the charge of $2.50 being absorbed by the various carriers.

The State Belt Railroad is owned by the state of California and operated by the Board of State Harbor Commissioners. Its tracks extend around the water front of the city of San Francisco. All switching services on this line are performed by its own engines at a charge of $2.50 per car but its facilities are dedicated to the use of any carrier that may desire to employ them. Thus the sole function of the State Belt Railway is in rendering terminal facilities. The Santa Fe, on the other hand, is in active competition with the other two carriers for main-line hauls.

Consequently, the Commission decided that the two industries involved two entirely different situations. To compel the defendants to absorb the switching charges paid by the California Canneries Company on non-competitive traffic would have been equivalent to ordering the carriers to throw open their terminal facilities to the free use of their competitors. Had the services of the Belt Railroad been performed by a carrier competing with the defendants and the latter had refused to absorb the Santa Fe switching charges of the

[22] 12 C. R. C. 488. See *Assoc Jobbers of L A. vs. A. T. & S. F. Ry*, 18 C. R. C. 9.

complainant, discrimination would have undoubtedly resulted and the Commission would have abolished it.

Although the classification of commodities moved by carriers is based, to a considerable extent, on the value of the commodities, and although, as we have seen, "value of service" plays an important part in rate-making today, yet the California Commission has decided that a common carrier cannot charge a higher rate for moving a commodity, under *exactly similar circumstances*, to one community where it has one value than to another where it has another value. In other words, where conditions are *exactly the same* the varying values of a commodity determined by its various uses do not justify a differentiation of rates. This was decided in *Pacific Fibre and Retarded Company vs Southern Pacific Company*[23] The defendant in this case was charging a different rate on bean straw from a number of points in southern California to Ventura than it was for the same commodity from the same points to Los Angeles, the distance being almost exactly the same.

In defense of the practice the railroad maintained that the transportation of straw to Ventura constituted a different kind of traffic from that to Los Angeles, since the straw hauled to Ventura was used solely for the manufacture of retarder and fiber, while that to Los Angeles was used solely for hay or fertilizer. The defendant also claimed that it rendered a more valuable service to complainant in Ventura since the straw was worth $30 a ton in Ventura by virtue of its use while it was worth only $7 in Los Angeles. No evidence was introduced to show that there was any difference in the cost of moving straw in either case

Such a system of rate-making is obviously untenable, since, if it were carried to its logical conclusion, every public utility rate would vary not only with the circumstances of the consumers but also with the varying demand of that consumer from time to time. The Commission asserted that such a method of charging could not be sanctioned and accordingly ordered the removal of the discrimination.

Carriers, however, cannot always be compelled to charge the same rate for the movement of the same commodity over equal distances. This was brought out in the case of the *Union Rock Company vs. The Atchison, Topeka and Santa Fé Railway Company, Southern Pacific Company, and Pacific Electric Railway Company.*[24] The complainant, a company engaged in the production and distribution of crushed

[23] 13 C R. C. 61. [24] 27 C. R. C. 285.

rock, sand, and gravel in southern California, protested against the rates it was compelled to pay on these commodities by the defendant railways and argued that the mileage scale of the Southern Pacific and the Santa Fé in northern California on these commodities should be applied in the south.

The defendants introduced a great deal of evidence to show that operating conditions were more expensive in the south because of severer grades, greater curvature per mile of track, and expensive terminal handling in Los Angeles. The Pacific Electric Railway which transported most of the rock company's freight presented figures of cost of handling and revenue received which showed that the traffic was not profitable. The Southern Pacific and the Santa Fé showed conclusively that their rates in northern California were largely water-compelled. Hence these rates did not form a fair basis of comparison. The Commission reached the conclusion that:

> It is within the power of the carriers to meet competition and to initiate rates lower than this Commission could justly prescribe as reasonable, and such rates would be lawful so long as they provided sufficient revenue to cover out-of-pocket costs and did not burden other traffic. The Commission is empowered by law to establish reasonable rates. Such rates must allow for actual costs of service and compensation for the capital invested in rendering that service When rates are attacked it is our duty to see that they are not so high as to be oppressive upon the shipper Between such rates and rates that cover something more than out-of-pocket costs there is a zone which should be free from judicial interference The carriers have complete control over rates which fall within this zone, and it seems to me that the rates here attacked clearly come within such a zone (*City of Detroit vs. Michigan Railroad Commission* 209 Mich. 395).[25]

The preceding discussion has brought out the fact that, where circumstances and conditions are sufficiently similar, rates on the same commodities must be comparable. There is no formula as to what constitutes similarity and hence each case must be decided on its merits. "The mere showing that rates from one point in a territory are higher than rates from other points in that territory whether maintained by the same carrier or different carriers, does not establish the fact of undue prejudice or preference."[26]

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[25] *Ibid.:* 296. See *L. A. Lumber Products Co vs. S. P. Co.*, 26 C. R C. 217.

[26] *Sperry Flour Co. vs. Island Transportation Co.*, 30 C R. C. 561, citing: *Texas & Pacific R. R. vs. I. C. C.*, 162 U. S. 197; *I. C. C. vs. Alabama Midland R. Co*, 168 U. S. 144; *Louisville & N. R. Co. vs. Behlmer*, 175 U. S. 648; *East Tennessee V. & G. R. Co. vs. I. C. C.*, 181 U. S. 1; *I. C C. vs. Louisville & N. R. Co.*, 190 U. S. 273.

Comparison of the Value of the Service and the Value of the Commodity to Determine the Reasonableness of Tranportation Rates

Finally, rate comparisons may be based upon the relative values of the commodities carried or the services rendered Generally speaking, this is merely another phase of "what the traffic will bear" Sometimes, however, the decision rests upon merely a comparison of values, especially when "ability to pay" is essentially equal.

Comparison of the values of services performed as a means of judging the relative equity of rates does not mean the value of the same service to different consumers but rather comparison of the superiority of one type of service to another. This was used as a gauge for passing upon the reasonableness of rates in the application of the Southern Pacific Company to increase passenger fares between San Francisco and Broadway wharf in Oakland[27] The company was furnishing transportation over distances varying from seven to eleven miles at ten cents per passenger from San Francisco via Oakland Pier to various points reached by its suburban electric system. In the case cited it proposed to charge the same fare from San Francisco to Oakland via another route, namely Broadway wharf, on which the passenger had no opportunity to ride on the suburban electric trains to his home. The Commission denied the application on the ground that the service in connection with the suburban trains was *more valuable* to the traveling public than the other. The former type was more valuable than the latter simply because it was a superior service and carried more privileges. Consequently the application for permission to raise the fare of the inferior service to the same level as that of the superior was denied.

Where the values of commodities transported are comparable and conditions of transportation are similar, rates may be expected to be approximately the same. This was the principle adopted in *Rice Assoc. of Calif. vs. Sou. Pac. Company and Atchison, Topeka and Santa Fé Railway Company.*[28] The complainants in this case alleged that the rates charged by the defendant carriers for the transportation of paddy rice from and to various points in California were unjust and unreasonable. They also contended that paddy rice should be

[27] 2 C. R. C. 21. See *San Jose Water Co.,* 7 C. R. C. 762.

[28] 10 C. R. C. 324.

given the same rates as grain. The rates which were called into question were from points in the Sacramento and San Joaquin valleys to Sacramento and San Francisco.

In support of their contentions the complainants first of all presented figures to show that the paddy rice tonnage for 1917 in the valleys would surpass wheat tonnage for the same districts. Figures were then introduced which compared, from selected points in the San Joaquin and Sacramento valleys, shipments of rice and wheat as to: rate in cents per 100 pounds on each; rate in cents per ton-mile; earnings per car; and earnings per car-mile. The comparisons demonstrated that in each case the figures for rice were higher than for wheat.[29] The rates on paddy rice in California were then compared with rates on the same commodity for similar distances in Texas, Louisiana, and Arkansas In this connection Commissioner Gordon noted:

> The traffic herein considered moves over a practically level stretch of country, consequently rates constructed on distance scales applying between all points in such states as Texas, Louisiana, and Arkansas, regardless of transportation conditions, are comparable, and while not controlling as to the reasonableness of rates in California, they are enlightening.[30]

Complainants also introduced a schedule showing what would be the results in California as to: rate in cents per 100 pounds; rate in cents per ton-mile; earnings per car; and earnings per car-mile, if the Louisiana rate scale were applied to California. After considering all these factors Commissioner Gordon concluded:

> The records disclose no transportation differences in the movement of paddy rice, wheat, other cereals and dried fruits; that the value of paddy rice is but a trifle higher than wheat and less than dried fruit; that loss and damage are a negligible quantity; that paddy rice is usually loaded beyond the minimum prescribed, and that no different equipment is required for its transportation.[31]

Consequently, a new schedule of rates on rice, with rates considerably lower than the old schedule, was prescribed

The conclusion to be drawn from this decision is that whenever commodities of similar value, requiring essentially the same expenses of handling, are transported by a company under substantially similar circumstances and conditions, they must be accorded the same rate. What constitutes substantially similar circumstances and conditions is a debatable question and no general rules relating thereto have as yet been prescribed.

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[29] *Ibid.*:326. [30] *Ibid.*:328.

[31] *Ibid.*: 329–30. See also *Pinney & Boyle Mfg. Co vs A T. & S F. Ry. Co*, 7 C. R. C. 688; *H. H. Dennison vs. S. P. Co*, 14 C. R. C. 30; *Phoenix Milling Co. vs. S. P. Co.*, 14 C. R. C. 38; *City Street Impt. Co. vs. S. P Co*, 14 C. R. C. 666

The policy of the Interstate Commerce Commission in the use of comparative values as a means of judging particular rates is shown by the following quotations:

> The value of the article is important principally because of its bearing upon the value to the shipper of the transportation service, and the value of the service is, and has always been considered by carriers, one of the important elements to be considered when fixing the rates to be charged for transportation.[32]

And again:

> *The value of an article to the manufacturer is the price it commands and it seems only reasonable that carriers should take into account the market value, a thing generally known and easily ascertained, as one of the considerations in arranging their classifications and fixing the rates that a commodity should bear.*[33]

It is evident that both the federal and the California authorities have taken the same factors into consideration. This is to be expected since the Interstate Commerce Commission is the controlling agency in freight rates.

In summary then, rate comparisons may be used in a variety of ways to measure the reasonableness of particular rates. Where rate schedules are voluntarily adopted and maintained by utilities, *prima facie* evidence of fairness of those rates to the concern exists. Consequently, charges out of line with these may be considered discriminatory. A comparison of rates in one locality with those in another which is served by a different utility is a very common basis of rate complaints. This is, of course, no ground for lowering rates but it serves to focus attention on efficiency. Finally, the value of shipments is an important factor and is always given consideration in fixing railroad rate schedules.

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[32] Quoted in Hammond, M. B., *op. cit.* 22.

[33] *Ibid.*:34. For a fuller discussion see Ripley, W. Z., *op. cit.*

CHAPTER IX

CONCLUSION

Introduction

This study of the rate theories underlying the decisions of commissions and courts alike, shows that the task confronting them is distinctly of a twofold nature, and that each phase is really a separate problem in itself. The first and most fundamental problem, and the one which gives rise to the most difficulty disputes, concerns the general rate level It is here that the courts find their work, for this problem involves the question of taking property without due process of law. The greatest number of cases coming before the commissions, however, are concerned with particular rate adjustments. Both authorities, of course, are primarily concerned with the general rate level, since that is the fundamental problem underlying all rate regulation. But the reasonableness of particular rates is for the commissions themselves to decide, and their decisions regarding these rates are not subject to court review.[1] Thus the function of the courts is solely one of interpreting the law and of passing upon confiscation when the revenues and properties of the utilities as a whole are considered.

Particular Rates

The question of particular rates presents two decidedly distinct aspects, depending upon whether it be viewed from the social standpoint or from that of a private company. In the first instance, the issue becomes one of what rates ought to be, considering the welfare of the community as a whole. For example, Pigou has argued that the chief burden of utility charges, especially transportation, should be placed upon the general body of taxpayers. Some German writers have advocated that the costs of actually moving traffic should be borne by those for whom the service is performed, while all the other costs should be met by taxation. Since the war, proposals have been

[1] Johnson and Van Metre, *op. cit.:* 541–543. Of course commissions cannot compel rates which do not yield out-of-pocket costs. The problem here, however, is essentially that of individual rate adjustments. This is largely a question of fact, in which the commissions are the final arbiters.

made in France to provide transportation services free of charge, the costs to be met by the government. A similar situation is presented in this country in connection with highways, and inland and coastal waterways. Writers have also urged that rates should be based on ethical considerations and hence should be adjusted according to what the users of utility services ought to pay from the standpoint of economic ability.[2]

A private company, on the other hand, looks at the problem as one concerning the best way to obtain revenue. Obviously, business conditions form the main guide in this case and rates are adjusted according to economics, not ethics. Fortunately, the public and the private viewpoints coincide to a large extent and the resulting rate incidence may be, and often is, both ethically and economically desirable.

The examination in the preceding chapters of the rate theories of courts and commissions has shown that the authorities have endeavored to reconcile, within the limits of the law, the interests of the public and of the private corporations rendering service to it.[3] Having decided upon the total revenue to which they have considered the utilities justly entitled, they have then proceeded to apportion the burden of supplying that sum by giving due weight to all the circumstances surrounding the particular case. As we have seen, these are many and varied and the determination of what a particular rate should be cannot be made by any rule of thumb, nor will any one standard suffice.

In the difficult problem of the rate differentials to be allowed by regulating bodies, social considerations play an important part and the handling of these must be left to the judgment of the authorities in the individual cases. Then, too, the relative ability of various items of traffic to bear the charges must be given due weight. Just what the differential, on this basis, should be, it is impossible to say. Recent cost studies have tended to show that it is considerably less than private corporations, permitted to use their own judgment, have been wont to accord.[4] Of course, it varies with different corporations according to the amount of business they are doing. When a utility is working up to the capacity of its plant the differential between additional cost

[2] For a discussion of these points see: Bauer, John, *op. cit.*, chap. 11; Clark, J. M., *Standards of Reasonableness in Local Freight Discriminations;* Pigou, A. C., Economics of Welfare (1925 ed), chap. 17.

[3] See also, Bye, R. T., "Social Welfare in Rate-making," *Pol. Sci., Quart.*, 32:Dec. 1917.

[4] See Clark, J. M., *Economics of Overhead Costs;* Ely, Owen, *Railway Rates and Cost of Service.*

and average cost is much less than is the case when there are unused facilities. Only careful study of each separate case can indicate what the difference may be between the additional and the average cost.

The general tendency of commissions in fixing rates today, as far as it is feasible, is to adopt cost as the determinant of particular rates.[5] Such a basis of adjustment places the incidence upon the consumers of utility service in accordance with their demands, thus preventing the costs of waste from being shifted to the shoulders of others and at the same time placing upon the companies themselves the burden of proof in cases of discrimination

This very theory, however, makes it necessary to work down from the general level of rates to particular rates rather than vice versa. The former cannot be fixed without due consideration being given to the latter, for there is a decided reaction between the two; but the starting point must be the financial need of the utility, and the individual rates must be adjusted so as to meet this as nearly as possible Consequently, it becomes necessary to decide upon the method of establishing the general rate level.

General Rate Level

Problem of the general rate level—

The chief controversy in regulation today, namely, the question of reasonable rates, revolves around the total revenue to be allowed a utility corporation. Although other knotty problems are looming up rapidly, this is, at the moment, *the* problem in utility control. Various opinions are held as to the solution. The courts have decreed that a utility is entitled to a "fair return on a fair value." "Fair value" to all intents and purposes means, to the United States Supreme Court, cost of reproduction. Unfortunately, "fair return" has been defined with an indefiniteness that makes the method of fixing "fair value" appear precise by comparison. At the present time, a "fair return" seems to lie somewhere around seven or eight per cent but it is impossible to say just how this figure is obtained.

Fortunately, not all of the commissions have slavishly followed the decisions of the courts. Most of them, perhaps all, have arrived at reasonable rates by fixing the rate base and then prescribing a fair

[5] Cost in this sense of the word of course means the total burden incident to the supplying of utility services. The California authorities have maintained that unless there are special reasons each consumer should contribute toward the "fair return."

return on that base.[6] Several commissions, however, have advanced theories of their own as to what constitutes "fair return" and "fair value."

As we have seen, the California authorities have insisted that historical cost, or reasonable investment, which theoretically means the same thing, is the correct base, and they have been able to maintain this position in spite of the rulings of the Supreme Court, and also the contentions of local utilities, for cost of reproduction. It is regrettable that land has been treated differently from other utility property. The commission has valued land at "present fair market price," but in doing so has stated that this was because of the ruling of the Supreme Court in the Minnesota Rate Cases. In view of the fact that the authorities stated very early in the present Commission's history their theoretical opposition to the Supreme Court doctrine, they should have adhered to their conviction that reasonable investment is the measure of fair value. This might have involved litigation had the utilities seen fit to dispute the ruling, but there is no reason why commissions should not be willing to advance, constantly, their contentions before the courts—and as persistently as the utilities have done.

The method by which the California Commission has determined the fair return to be allowed is not so precise as the way in which it has fixed the base. As a matter of fact, it has been more concerned with setting a rather definite *per centum* return than in ascertaining the revenue requirements. Moreover, the per centum return has become largely a matter of precedent and today cases of fifteen years ago are cited as authority for fixing a certain rate. It is true that no definite rate applies to all utilities and some attention is paid to *average* cost of money for a given concern, but, except where unusual conditions prevail, seven to eight per cent is considered reasonable. Furthermore, these percentages have come to receive the sanction of being more or less absolutely fair.[7]

[6] Barnes contends that the Massachusetts commissions have given practically no weight to the question of the rate base, but on the contrary have made the credit of the company the determining factor. Mosher, however, does not agree with this but seems to think that due consideration is given to "reasonable investment." See Mosher, W. E., *Review of Public Utility Control in Massachusetts*, by I. R. Barnes, *Am. Econ. Review*, 20:518–521 (Sept. 1930).

[7] "Edison company proposes for the consideration of the Commission that its rates be established so as to provide, in addition to its operating expenses, a return sufficient to pay its interest and dividend requirements, to establish a contingency reserve which will insure the continuity of its dividend rates and will provide for the fluctuation in its operating expenses without corresponding changes in its rates in years of large and small water supply for hydro-electric generation.

Thus, theoretically at least, the method of determining reasonable rates by the California authorities is one of rigid formula. In practice, however, there is somewhat more flexibility. Unusual conditions are recognized, with the result that the actual return may not conform to the basic standard. Varying economic conditions have, to date, generally kept the average return below the theoretically fair one. This does not mean, of course, that the utilities have necessarily suffered, because the customary fair return seems to be quite adequate, to say the least. Finally, if a liberal estimate is made in fixing the rate base, then the rate of return will be set at a somewhat lower figure than if the reverse is the case.

A number of pertinent current problems of regulation have not been grappled with, or at least no satisfactory solution has been offered. This is not because difficulties have not arisen, but rather because of the theory of regulation which has been so rigidly adhered to in California.

First of all, no adequate answer has been given to the question of competition. In general, it has been the policy to grant and to pre-

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In addition to these requirements, it proposes a substantial surplus and the savings to be derived through efficiencies in operation may be divided between its consumers, its employees and the company itself as a reward for efficiency.

"The Commission fully appreciates the interrelation between the earnings of a utility and its ability to command new capital from investors to provide the facilities required by the growing demands of its business and its obligation to the public. *This does not mean, however, that the Commission will permit applicant or any other utility to charge in excess of a reasonable rate in order that additional capital can be secured.*

"*No measure of earnings can be approved by a body, such as this Commission, charged with the protection of the public interest which does not result, for equal benefits, in a rate as low as, or lower, than the rate which would be fixed upon the standard accepted basis of a fair return upon the reasonable value of the utility properties.* In this, therefore, as in other rate fixing proceedings, the primary consideration is a fair return upon the properties used and useful in the public service.

"The first problem to be solved, therefore, is the determination of a proper rate base and what is a fair return to be allowed thereon, the fixing of reasonable depreciation annuity and operating expenses." Re-*Southern California Edison Co.*, 19 C. R. C. 595, 601. (Italics mine.)

"The question before this Commission is: What is a fair return to be applied to the rate base found reasonable under all of the circumstances and conditions? The question is not what might pass the courts as above the confiscation limits. It is, what is the compensation for the use of moneys that will be fair between the investor and the operators of the property, on the one hand, and to the public served, on the other. A reasonable return will normally be in excess of the average cost. This principle has been enunciated by this Commission in numerous decisions. In the early history of the Commission, many important decisions found that an 8 per cent return was reasonable. Higher rates of return were allowed as reasonable with the higher cost of money conditions during the war and post-war period. With the reducing cost of money occurring during the last ten years and increasing stability of major utilities, reducing rates of return have been found reasonable. It is our conclusion that, in the instant case, a return on the rate base of approximately 7 per cent is reasonable and fair, both to the company and to the public."—*Pac. Tel. & Tel.*, 33 C. R. C 737, 772–773.

serve monopolies whenever feasible and whenever this has served public interest The exceptions are many, however. In some instances, competition has resulted from the fact that the utilities were in the field prior to the advent of the present Commission, while in other cases concerns have been admitted to an area already served by another company either because the latter was not living up to its obligations as a public service corporation or because apparently there was room for two enterprises. The authorities recognized the dilemma quite early but failed to meet the issue Later, they adopted the policy that no concern was entitled to more than a fair return. This meant of course that rates were set at the point which would yield a fair return to the strongest corporation but which would be less than fair to the weaker. At the same time, a fair return is supposed to represent the income necessary to attract capital adequate to meet the demands of the public for service. Evidently no solution to the "weak and strong" problem, so prominent in the railroad field, is to be found in California.[8]

The situation is aggravated by the Commission's policy regarding potential competition. This seems to be a confession of weakness. Admittedly, it is difficult at times to maintain efficiency at a high standard under regulated monopoly. It is hard to see, however, how the admission of competition can solve the problem; jumping from the frying pan into the fire is merely to leap from one position to another equally as bad, or worse. It must be conceded that the public is entitled to the best possible service at the lowest cost, and when a concern is able to demonstrate conclusively that it can serve a community more satisfactorily than can the one already in the field, the consumers may, with reason, insist upon the admission of the second concern. This changes the issue to that of competition, which, as we have seen, merely presents another dilemma. The solution would seem to lie in the encouragement of consolidation where more efficient concerns are prepared to serve territory occupied by less efficient ones; where the existing company is capable of rendering service equal to that of the corporation seeking to enter, the latter should not be granted permission to compete. The sanctioning of competition for punitive reasons is no solution to the problem of efficiency of regulated enterprises.

[8] It may be argued that the California policy is designed to spur the less efficient corporations to greater efforts, and that one company ought to be able to serve at given rates if its competitor can. The contention is advanced that the public is entitled to the lowest possible rates and that no concern may receive more than a fair return from these. Obviously, however, all competitors cannot be equal and weak, *necessary* concerns must be taken care of.

Obviously the California authorities have little to offer by way of answer to the question: What methods can be devised to *encourage* efficiency in management and how can the results of economies be shared by consumers and producers alike?[9] The Commission has always maintained that a fair return can be expected only under conditions of efficient and economical management, but this is rather a negative attitude. From the social viewpoint the first requisite is the production of utility services at the lowest possible cost. The next step in the procedure is to provide for the distribution of the benefits so obtained.

Periods of prosperity and depression, of rising and falling prices, are characteristics of the present-day economic order. Railroads have long felt the influence of these changes, and the growing dependence of power utilities on the operations of industrial concerns is bringing the cycle curves of these utilities into close consonance with general business curves.[10] A satisfactory rate policy must recognize this state of affairs. Yet, by and large, commissions have contributed but little to a solution to the problem thus raised. As we have seen, the California authorities, as well as those elsewhere, have adopted the principle that the rate of return must be approximately stable from year to year and that at no time must a utility earn more than a fair return. The result of this is twofold: first of all, utilities over a period of years cannot earn an average income which is fair according to the established standards;[11] second, rate schedules based on such a method are too inelastic. Indeed, if the theory were rigidly followed rate systems would be perversely elastic. Stability of rates is the objective, but stability of rates will not result in stability of net income. The former within certain limits is to be desired but there seems to be no reason why the return from year to year might not vary. Why

[9] "The Public Utilities Act (sec. 20) clearly provides for the approval of a plan for permitting a utility to share in savings due to efficiencies in operation, and the commission would welcome a sound and logical plan whereby the utility and the public would share in the savings from such operation, but no bonus should be paid by consumers to urge the utility and its employees to effect all possible efficiencies."—*So Cal Edison Co*, 19 C. R. C. 595, 610; see footnote 7, *supra*.

[10] See Patton & Gressens, "Influence of Business Cycles on Utility Operations," *Jour. of Land & P. U. Econ*, 2:40–47 (Jan. 1926). The present situation in railroad rates is an example of a constantly recurring problem.

[11] This is not to be interpreted as meaning that the California authorities have been too niggardly. On the contrary, they have been decidedly liberal. That the utilities do not on the whole receive an average return over a period of years which equals the Commission's standard of fairness seems to be rather strong evidence that the standard is too high, since the utilities in this state have, nevertheless, been able to develop adequately and to prosper.

could rates not be fixed in such a way as to yield adequate revenue over a period of years? During prosperity the corporation would receive more than a fair return but it could be required to put the excess into a contingency reserve which could be used to stabilize dividends and insure financial security during depression. Not only would the utilities benefit by having greater reserve strength with which to meet periods of stress, but they would be in a much better position to accord relief to needy industries or communities, and possibly they would be more willing to do so than at present. Viewed from this angle, the problem is simply one of maintaining the credit of utilities and of distributing the burden of meeting the income requirements of these concerns in the way easiest for the consumers to bear.

Finally, the California authorities have paid too much attention to the rate base and the rate of return as such, to the neglect of the question of financial requirements and credit of the utilities. This is a criticism which can be leveled against virtually all commissions and courts alike. Indeed, a strong body of opinion is growing up, especially among the younger students of the problem, that the rate base is not essential to the determination of a fair income, economically speaking.

A fair return, from the economic point of view, in the final analysis is simply the one which is sufficient to attract investment that is capable of meeting the needs of the locality served. The function of the administrative authorities, within the limits of the law, is to see that these conditions are met—no more and no less. If a larger income is allowed than is financially necessary, then the public is being discriminated against; if less, then the requisite capital will not be forthcoming and the utility and the public will both suffer. Moreover, the present method of regulation encourages the development of unhealthy financial structures. So long as commissions persist in prescribing a blanket rate of return for a concern, that state of affairs is bound to persist, for, obviously, it is to the advantage of the corporations to raise a large part of the capital at rates lower than the return being received, thereby giving a much larger percentage to the common stockholders—much larger than they demand or require. The results of this can be seen by examining the stock market quotations of public utility common stocks.[12] Ultimately, it is the consumers who

[12] See Cohen, J. H., "Confiscatory Rates and Modern Finance," Yale Law Journal 39:151 (Dec. 1929) for a discussion of financial structures and the problem of a fair return.

are compelled to meet the costs of this financing True, there is no legal guaranty of return to any enterprise, but in practice consumers must supply the money. Why, then, should practically all of the gains of advantageous financing accrue to the stockholders? This condition is bound to exist just so long as the present approach is adhered to

The fundamental problem in controversies involving reasonable rates is the amount of revenue reasonably necessary to a concern in order that it may function successfully. Actually, however, the dispute revolves around the questions: What is the fair value of the property? Is the corporation receiving a fair return according to law and precedent?

By definition the rate of return should depend upon financial requirements[14] Hence the rate of return becomes a function of two variables, namely, the rate base and the income necessary. The return under such circumstances is the percentage of the net revenue to the base, and in order to obtain this percentage both income and base must be known In practice this procedure does not seem to obtain. Apparently, the rate base is fixed first and then the income is adjusted so that it will give a predetermined per centum on that base. Obviously, no other course can be followed until financial structures and revenue requirements are carefully analyzed

For the time being at least, the courts seem determined to enforce the principle of a fair return on a fair value as the gauge of confiscation. But, with this as the lower limit, commissions are free to adopt the policy of financial need as the measure of reasonableness. Moreover, the courts have not rigidly defined the limits of confiscation Consequently, commissions could at least defend their position, should a decision be disputed, on the ground that they have allowed an income "adequate under efficient and economical management" for the utility "to maintain and support its credit and to enable it to raise the money necessary for the proper discharge of its public duties." Utilities argue for a higher return when these conditions are not met, and achieve remarkable success in the courts. Why can the commissions not do the same under reverse conditions?[14]

14 "The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties." *Bluefield Waterworks & Improvement Co*, 262 U. S. 679 (1923); see also *Palo Alto vs. Palo Alto Gas Co.*, 2 C. R. C. 300.

14 See Cohen, J. C., *supra* note 13.

The foregoing discussion must not be interpreted as meaning that substantial contributions to the development of a sound policy of regulation have not been made in California. Quite the reverse is true. When comprehensive regulation commenced in 1911, inexperience characterized the procedure everywhere and the question of reasonable rates was in its infancy. The commissioners of that time established a firm foundation upon which a progressive procedure could be erected. If they were somewhat unduly legal in their viewpoint, they may be excused because of the newness of their task. To their credit it should be recorded that they gave considerable attention to the economics of the situation; in addition, they ventured upon avenues of approach, which, had they been followed up, would probably have saved us from many of the subsequent pitfalls. Finally, their work on valuation was extremely valuable. Even if it may be criticized as the basis of rate-making, it still remains the best basis by which reasonable capitalization may be determined, and the latter is certainly necessary in any regulatory program.[15]

Unfortunately, the Commission has become too bound down by precedent. What is needed now is a dynamic policy which frankly recognizes the inadequacy of early theories and practices for the solution of present issues. Regulation is not static, it is ever growing, ever changing. Consequently, theories and practices must develop accordingly, if regulation is to meet the tasks thrust upon it.

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[15] See Bonbright, J. C., "Railroad Capitalization," (Columbia University *Studies in History, Economics, and Public Law,* No. 215, 1920) chap. 3.

BIBLIOGRAPHY

I. Documentary and Source Material

California—
- Laws of California.
- Annual Reports of the California Railroad Commission.
- Opinions and Orders of the California Railroad Commission.

United States—
- Interstate Commerce Act.
- Annual Reports of the Federal Power Commission.
- Annual Reports of the Interstate Commerce Commission.
- Interstate Commerce Commission Reports. (Decisions of I C C.)
- Statistics of Railways in the United States (I C C.)
- United States Supreme Court Reports.
- Annual Report (First) of United States Shipping Board.
- American Railway Association, Car Service Division, Annual Bulletins.
- *Bureau of Railway Economics, Bulletins*
- Preliminary Report of the Inland Waterways Commission, 1908.

Report of the Royal Commission on Canals and Waterways, Great Britain, 1908.

II. Periodical References

Bickley, John H., "Public Utility Valuation for Rate Purposes," *Am. Econ. Rev.* (March, 1926).

Bye, R. T., "Social Welfare in Rate-making," *Pol. Sci. Quart*, 32 (December 1917).

Bickley, J. H., "A Fair Return for Public Utilities," *Jour of Land & Public Utility Econ.*, 3:61–70 (February 1927)

Bonbright, J. C., "Progress and Poverty in Current Literature on Valuation," *Quart. Jour. Econ.* (February 1926).

"The Economic Merits of Original Cost and Reproduction Cost," *Harvard Law Review*, 41·593 (March 1928).

"Railroad Valuation with Special Reference to the O'Fallon Decision," *Am Econ. Rev.*, 18(Sup):181 (December 1928)

Brown, H G, "Railroad Valuation and Rate Regulation," *Jour. Pol. Econ.*, 33, (1925)

Clark, J. M, "Railroad Valuation as a Working Tool," *Jour. Pol. Econ*, 28 (April 1920).

Cohen, J. H., "Confiscatory Rates and Modern Finance," *Yale Law Jour.*, 39:151 (December 1929).

Dozier, H. D., "Reasonable Rate of Return in Public Utility Cases," *Jour. Land and P. U. Econ.*, 3:71–76 (February 1927).

"Present Reasonable Rate of Return of Public Utilities," *ibid.*, 4·235–242 (August 1928).

Erickson, H., "Electric Lighting and Power Rates," *Annals Am. Acad*, 53 (May 1914).

HAMMOND, M. B., "Railway Rate Theories [of the I. C. C.], *Quart. Jour. Econ.*, 25 (1910–1911).

HANEY, L. H., "Joint Costs with Especial Regard to Railways," *Quart. Jour. Econ.*, February 1916.

LEWIS, H. T., "Interest and Profits in Rate Regulation," *Pol. Sci. Quart.*, 27.

LINCOLN, E. E., "Control of Return on Public Investments," *Am. Econ. Rev.*, December 1916.

LORENZ, M. O., "Cost and Value of Service in Railroad Rate-Making," *Quart. Jour. Econ.*, 30 (February 1916).

PATTON, A. E., and GRESSENS, O., "Influence of Business Cycles on Utility Operations," *Jour. Land & P. U. Econ.*, 2.40–47 (January 1926).

PEGRUM, D. F., "Legal vs. Economic Principles in Valuation," *Jour. Land & P. U. Econ.*, 6.127–135 (May 1930); 235–240 (August 1930).

Railway Age Gazette, "Making Rates for a New Railway—An Object Lesson in Economics," 40 (December 16, 1910).

RUGGLES, C. O., "Problems of Public Utility, Rate Regulation and Fair Return," *Jour. Pol. Econ.*, 1924.

TAUSSIG, F. W., "Theory of Railway Rates," *Quart. Jour. Econ.*, 5 (1890–1891).
"Debate of F. W. Taussig and A. C. Pigou," *ibid.*, 27 (1912–13).
"Price Fixing," *ibid.*, February 1919.

WATKINS, G. P., "Theory of Differential Rates," *Quart. Jour. Econ.*, 1916.

WOOLLEY, R. W., "How Freight Rates Should be Made," *Annals Am. Acad.*, 86 (November 1919).

III. Books

ACWORTH, W. M., *Elements of Railway Economics.* Oxford, 1923.

BARKER, H., *Public Utility Rates.* New York, 1917.

BARNES, I. R., *Public Utility Control in Massachusetts; a study in the Commission regulation of security issues and rates.* New Haven, 1930.

BAUER, J., *Effective Regulation of Public Utilities.* New York, 1925.

BONBRIGHT, J. C., *Railroad Capitalization.* New York, 1920.

BROOKS, C. E., The Railroad Commission (Master's Thesis, Department of Economics, in University of California Library, 1916).

BROWN, H. G., *Transportation Rates and their Regulation.* New York, 1916.

CLARK, J. M., *Standards of Reasonableness in Local Freight Discrimination.* New York, 1910.
Economics of Overhead Costs. Chicago, 1923.

COLSON, C., *Transports et Tariffs.* Paris, 1908.

COOKE, M. L., *Public Utility Regulation.* New York, 1924.

CUNNINGHAM, W. J., *American Railroads.* New York, 1922.

DAGGETT, S., *History of the Southern Pacific.* New York, 1913.
Principles of Inland Transportation. New York, 1928.

DEWING, A. S., *Financial Policy of Corporations.* New York, 1926.

DIXON, F. H., *Railroads and Government.* New York, 1922.

DUNN, S. O., *The Regulation of Railways.* New York, 1918.

ELY, OWEN, *Railway Rates and Cost of Service.* New York, 1924.

FENELON, K. G., *The Economics of Road Transport.* London, 1925

FLOY, H, *Value for Rate-Making* New York, 1916

GLAESER, M. G, *Outlines of Public Utility Economics.* New York, 1927

GRUNSKY, C. E., *Valuation, Depreciation, and Rate-base* New York, 1917

HADLEY, A. T., *Railroad Transportation.* New York, 1885

HAMMOND, M B, *Railway Rate Theories of the Interstate Commerce Commission.* Cambridge, Mass., 1911.

HANEY, L. H., *Business of Railway Transportation.* New York, 1924

HARTMAN, H. H., *Fair Value.* New York, 1920

HOLMES, F. L., *Regulation of Railroads and Utilities in Wisconsin* New York, 1915.

JACKMAN, W. T., *Economics of Transportation* New York, 1926

JOHNSON and HUEBNER, *Railroad Traffic and Rates.* New York, 1918.

JOHNSON and VAN METRE, *Principles of Railroad Transportation* New York, 1923.

JONES and VANDERBLUE, *Railroads—Cases and Selections.* New York, 1925

JONES, E., *Principles of Railway Transportation.* New York, 1924.

KEEZER and MAY, *The Public Control of Business.* New York, 1930.

KING, C. L., *Regulations of Municipal Utilities* New York, 1912.

KNOOP, D., *Outlines of Railway Economics.* London, 1913.

LAGERQUIST, W. E, *Public Utility Finance* Chicago, 1927

LOCKLIN, D. P., *Railroad Regulation since 1920.* Chicago, 1928.

LUST, H. C., *Consolidated Digest of Decisions under I C C Act 1887-1921.* Fowler, Indiana, 1924

LYNDON, L, *Rate-making for the Public Utilities.* New York, 1923.

MACGIBBON, D. A., *Railway Rates and the Canadian Railway Commission.* New York, 1917.

MADISON, M. P, *The Railroad Commission of the State of California—Its Power and Jurisdiction* (J D Thesis, in University of California Library, 1920)

MALTBIE, W. H., *Theory and Practice of Public Utility Valuation* New York, 1924

MCFALL, R J., *Railway Monopoly and Rate Regulation.* New York, 1916.

MCPHERSON, L. G, *Railroad Freight Rates.* New York, 1909.

MEYER, H. R, *Government Regulation of Railway Rates.* New York, 1905

MILLER, S. L., *Railway Transportation.* New York, 1924

MORGAN, C. S, *Regulation and the Management of Public Utilities* New York, 1923.

MOSHER, W E, *Electrical Utilities.* New York, 1929

MOULTON, H. G., *Waterways vs. Railways.* New York, 1914.

NASH, L. R., *Economics of Public Utilities.* New York, 1925.

PATTERSON and SCHOLZ, *Economic Problems of Modern Life.* New York, 1926

PIGOU, A. C, *Economics of Welfare.* London, 1925.

Public Utilities *Reports*, Annotated. Rochester, New York (Annual.)

RAYMOND, W. G., *The Public and Its Utilities.* New York, 1925.

RIPLEY, W. Z, *Railway Problems.* New York, 1907.

Railroads: Rates and Regulation. New York, 1916.

SHAEFFER, J. G. *Class Rates on American Railroads* (Ph.D. Thesis, Department of Economics, in University of California Library, 1925).

SHARFMAN, I. L., *Railway Regulation.* Chicago, 1915

SWISHER, C. B., *Motivation and Political Technique in the California Constitutional Convention, 1878–79.* Pomona College, 1931

VANDERBLUE, H. B., *Railroad Valuation.* New York, 1917.

VANDERBLUE and BURGESS, *Railroads—Rates—Service and Management.* New York, 1923.

WATKINS, G. P., *Electrical Rates.* New York, 1921.

WHITTEN, R. H., *Valuation of Public Service Corporations.* New York, 1912.
Regulation of Public Service Companies in Great Britain. Public Service Commission of New York, 1914.

WILCOX, D. F., *The Electric Railway Problem.* New York, 1921.

WOOD, H. E., *Public Utility Law—State and Federal.* Kansas City, Mo., 1926.

LIST OF CASES CITED

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